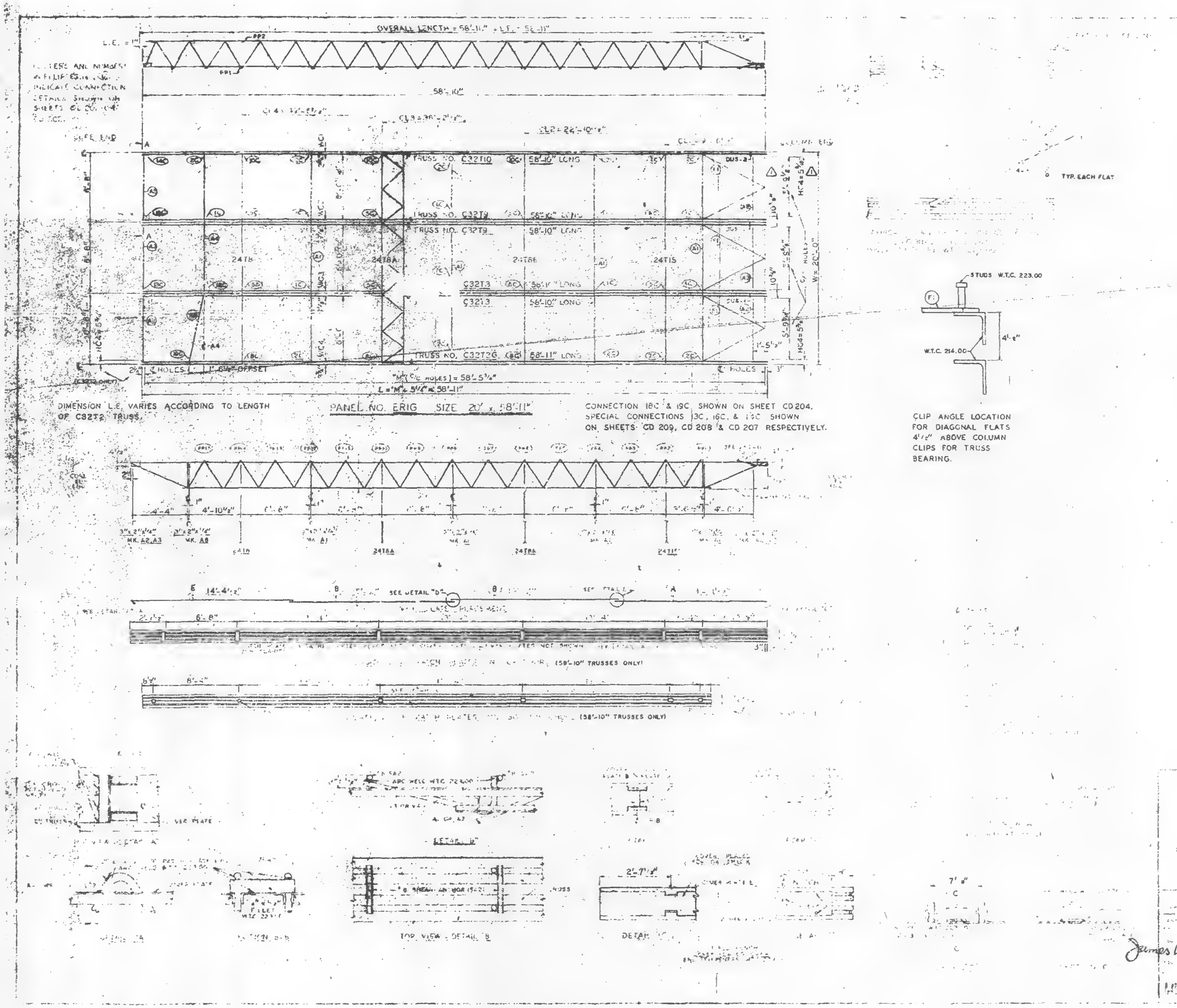
WTC1-131-LERA



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIG SIZE 20' x 58'-11"

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 17C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	58'-10"	[illegible]
	[illegible]	[illegible]	58'-10"	209
	[illegible]	1	58'-10"	[illegible]
[illegible]	[illegible]	1	[illegible]	[illegible] 208
	[illegible]	[illegible]	[illegible]	208A
	[illegible]	[illegible]	[illegible]	[illegible] 208B
	[illegible]	1	[illegible] 15	[illegible] 215
[illegible] 2" [illegible] ANGLE	[illegible]	6	[illegible]	[illegible]
	A2	4	[illegible]	[illegible]
	[illegible]	3	[illegible]	[illegible]
	A4	1	3"x2" [illegible] 13'-3"	ST 403
	A8	1	[illegible]	ST 405
[illegible] FLAT	F1	6	[illegible]	ST 402
[illegible]	[illegible]	3	[illegible]	[illegible]
	[illegible]	4	[illegible] 15'-2"	ST 303
	[illegible]	3	[illegible]	ST 303
ANGLE CLIPS	C1	20	[illegible]	ST 400
	C2	4	[illegible]	ST 400
[illegible]	[illegible]	2	[illegible]	[illegible]
	[illegible]	1	[illegible]	[illegible]
CONNECTION BAR	[illegible]	1	[illegible]	ST 400
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	8	[illegible]	[illegible]
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-9"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-0"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 1/4" x 0'-7"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW-HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

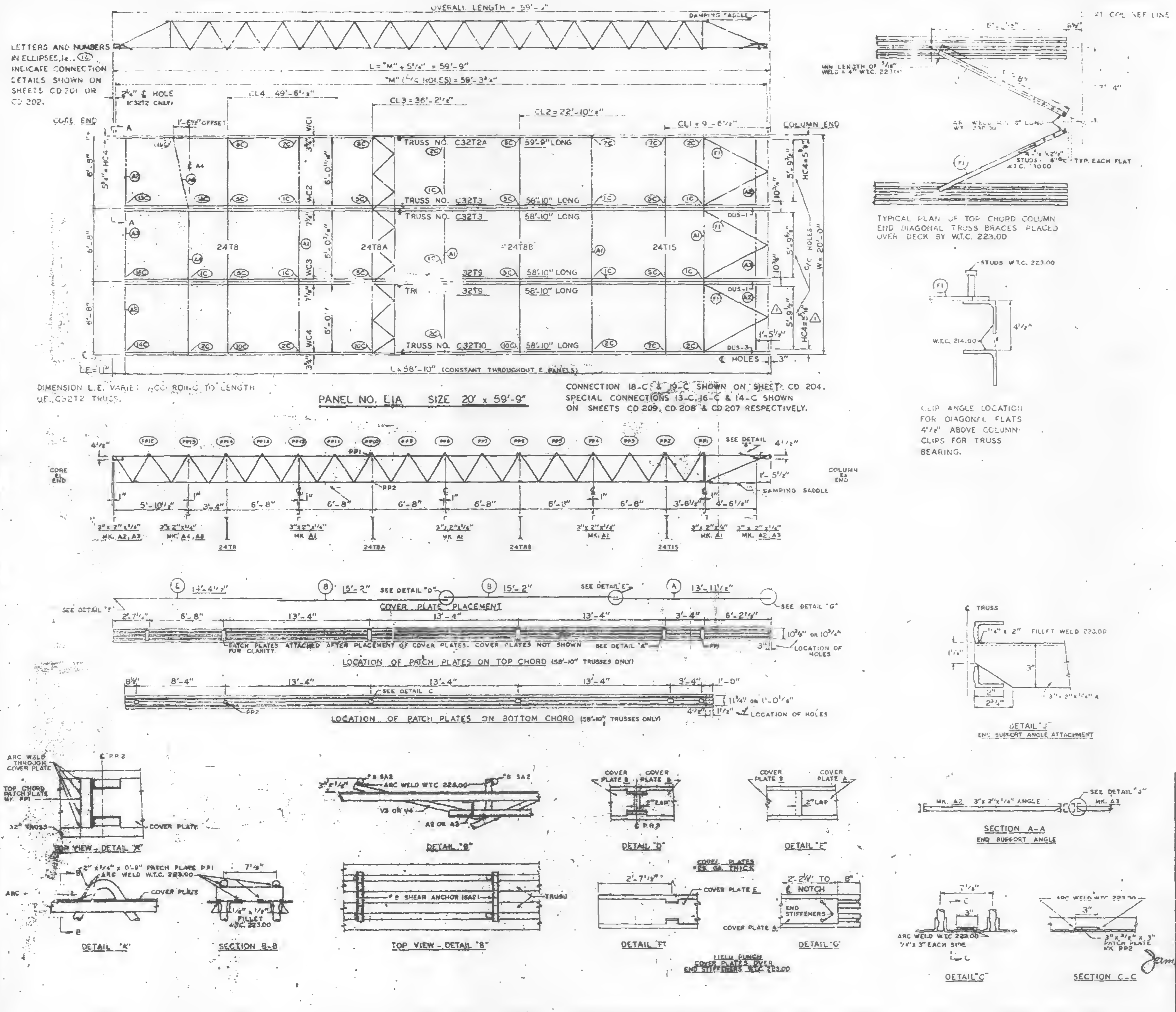
NO.	DATE	REVISION	BY
1	9-19-68	AS NOTED	T.N.C.

10-11, 39 (NORTH)

ERIG 58'-11"

James White 9/25/68

ERIG



[illegible] MATERIAL [illegible]				ST DWG.
MATERIAL	MK.	PCS.	SIZE	
[illegible] TRUSS	T2A	1	C32T2A [illegible]	ST [illegible]A
	T3	2	C32T3 [illegible]	[illegible]
	T9	2	C32T9 [illegible]	ST 209
	T10	1	C32T10 - 58'-10"	ST [illegible]
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	[illegible]
	T8A	1	24T8A - 19'-11"	ST [illegible]A
	T8B	1	24T8B - 19'-11"	[illegible]
	T15	1	24T15 - 19'-11"	[illegible]
3" x 2" x ¼" ANGLE	A1	4	3" x 2" x ¼" x 19'-11"	ST 403
	A2	4	3" x 2" x ¼" x 5'-1⅝"	ST 403
	A3	2	3" x 2" x ¼" x 5'-1⅝"	ST 403
	A4	1	3" x 2" x ¼" x 13'-3"	ST 403
	A8	1	3" x 2" x ¼" x 6'-5¾"	ST 403
DIAGONAL FLATS	F1	6	1½" x ⅜" x 6'-9"	[illegible]
COVER PLATES	A	3	9" x .0135" x 13'-11½"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-4½"	ST 303
ANGLE CLIP	C1	20	2" x 1½" x ¼" x 0'-6"	ST 400
	C2	4	2½" x 1½" x ¼" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x ⅜" x 3'-8⅞"	ST 298
	DUS-3	1	3½" x 3½" x ⅜" x 3'-8⅞"	ST 298
CONNECTION BAR	CS1	1	1" ⌀ x 1'-3"	ST 400
	CB2	8	1⅜" ⌀ x 1'-3"	ST 400
	CB3	6	1⅝" ⌀ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3½" x ⅜" x 6½"	ST 400
	F2	1	4½" x .39" x 0'-8"	ST 400
	F3	1	4½" x .39" x 1'-0"	ST 400
	F5	3	4½" x ¼" x 1'-6"	ST 400
	F6	1	4½" x .39" x 0'-8"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-8"	ST 400
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

NO	DATE	REVISION	BY
1	8-19-68	AS NOTED	T.M.C.

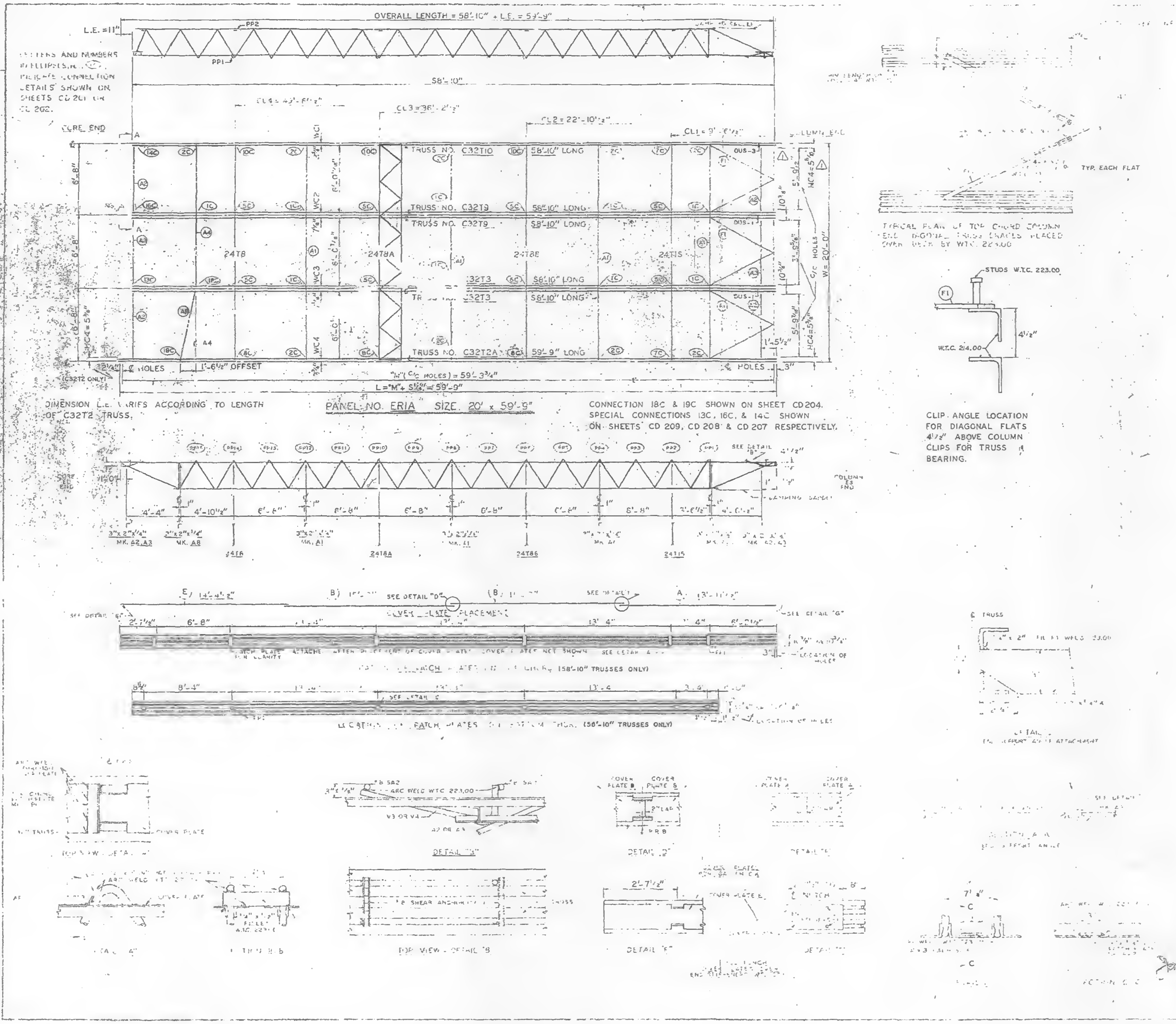
REF. DRWGS.

7-AB2-3 & 10	4-15-68
7-AB3-11	5-10-68
7-AB4-3, 3.1 & 39	1-3-68
7-AB4-15 & 16	5-6-68
7-AB4-42	4-1-68
SA-124	10-20-68
7-AB1-3	4-15-68
7-AB1-6, 7 & 8	5-10-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68, 69 (NORTH)
PANEL E1A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-11 5-10-68
PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. James White DATE 9/25/68
DRAWN BY adc DATE JULY 22, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M.CHURA DATE JULY 22, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A CARL WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP E1A



LETTERS AND NUMBERS IN ELLIPSES, INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

CONNECTION 18C & 19C SHOWN ON SHEET CD204.
SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER BEAM BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

[illegible]	[illegible]	1	58'-10"	203
	[illegible]		58'-10"	209
	[illegible]		58'-10"	210
[illegible]	TF	1	16'-11"	208
	TFA		[illegible]	208A
	TF6		2418E [illegible]	208B
	TF		15 [illegible]	215
3"x 2"x¼" ANGLE	A1	4	[illegible]	[illegible]
	A2	4	[illegible]	[illegible]
	A3	2	[illegible]	[illegible]
	A4	1	3"x 2"x ¼" x 13'-3"	ST 403
	A8	1	3"x 2"x ¼" x 6'-8⅝"	ST 405
DIAGONAL FLATS	F1	6	1½" x ⅝" x 8'-8"	ST 402
COVER PLATES	A	3	9" x .0135" x [illegible]	[illegible]
	B	6	9" x .0135" x 15'-2"	ST 302
	E	3	9" x .0135" x 14'-4½"	ST 303
ANGLE CLIPS	C1	20	2" x 1½" x ¼" x 0'-6"	ST 400
	C2	4	2½" x 1½" x ¼" x 6"	ST 400
DAMPING GAUGE	DUS-1	2	3½" x 3½" x ⅜" x 3'-6½"	ST 298
	DUS-3	1	3½" x 3½" x ⅜" x [illegible]	ST 294
CONNECTION BAR	CB1	1	1" ɸ x 1'-3"	ST 400
	CB2	5	⅞" ɸ x 1'-3"	ST 400
	CB3	6	1⅝" ɸ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3½" x ⅜" x 6½"	ST 400
	P2	1	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400
	P5	3	4½" x ¼" x 1'-6"	ST 400
	P6	1	4½" x .39" x 0'-9"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
PATCH PLATES	PF1	18	2" x ¼" x 0'-9"	ST 400
	PF2	18	3" x ⅜" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

NO.	DATE	REVISION	BY
△1	9-19-68	AS NOTED	T.M.C.

REF. DWGS. [illegible]

[illegible] 10	4-19-68
[illegible] 12	5-10-[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible] 124	[illegible]
[illegible] 3	4-19-68
[illegible] 6, 7 & 8	5-10-68

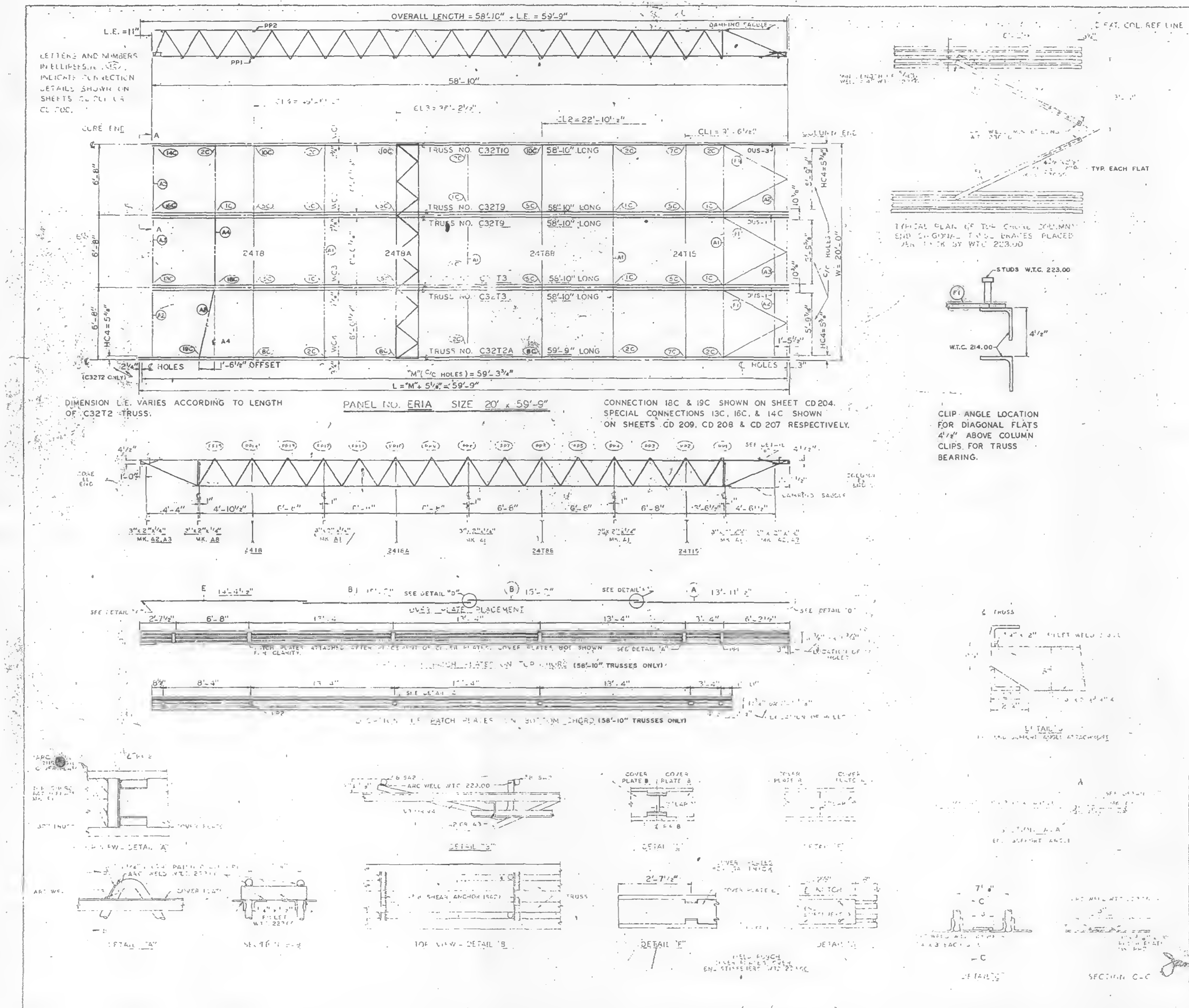
FLOOR PANEL DETAILS

PANEL ERIA

12 5 10

9/25/68

ERIA



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIA SIZE 20' x 59'-9"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MATERIAL	MK	REQ	SIZE	REF DRWG
TRUSSES	T2A	1	32T2A - 59'-9"	ST 207A
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3"x 2"x ¼" ANGLE	A1	4	3" x 2" x ¼" x 19'-11"	ST 403
	A2	4	3" x 2" x ¼" x 5'-1[illegible]"	ST 403
	A3	2	3" x 2" x ¼" x [illegible]	ST 403
	A4	1	3"x2" x ¼" x 13'-3"	ST 403
	A8	1	3" x 2" x ¼" x 6'-8⅝"	ST 405
DIAGONAL FLATS	F1	6	1½" x ⅝" x 6'-8"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11½"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 14'-4½"	ST 303
ANGLE CLIPS	C1	20	2" x 1½" x ¼" x 0'-6"	ST 400
	C2	4	2½" x 1½" x ¼" x 6"	ST 400
DAMPING SADDLE	[illegible]	2	3½" x 3½" x [illegible] x 3'-[illegible]"	ST 298
	DS-3	1	3½" x 3½" x ⅜" x 3'-[illegible]"	ST 298
CONNECTION BAR	CB1	1	1" ɸ x 1'-3"	ST 400
	CB2	8	1³⁄₁₆" ɸ x 1'-3"	ST 400
	CB3	6	1⅝" ɸ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3½" x ⅜" x 6½"	ST 400
	P2	1	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400
	P5	3	4½" x ¼" x 1'-6"	ST 400
	P6	12	4½" x .39" x 0'-9"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
PATCH PLATES	PP1	16	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

[illegible] 3 & 10	4-15-68
[illegible] 12	5-10-68
[illegible]	[illegible]
ADD 1' & 6	[illegible]-6-68
ADD 42	4-[illegible]-68
[illegible]	10-20-68
[illegible] 3	4-15-69
ADD 6, 7 & 8	5-10-68

FLOOR PANEL [illegible]

[illegible] SHEETS [illegible]

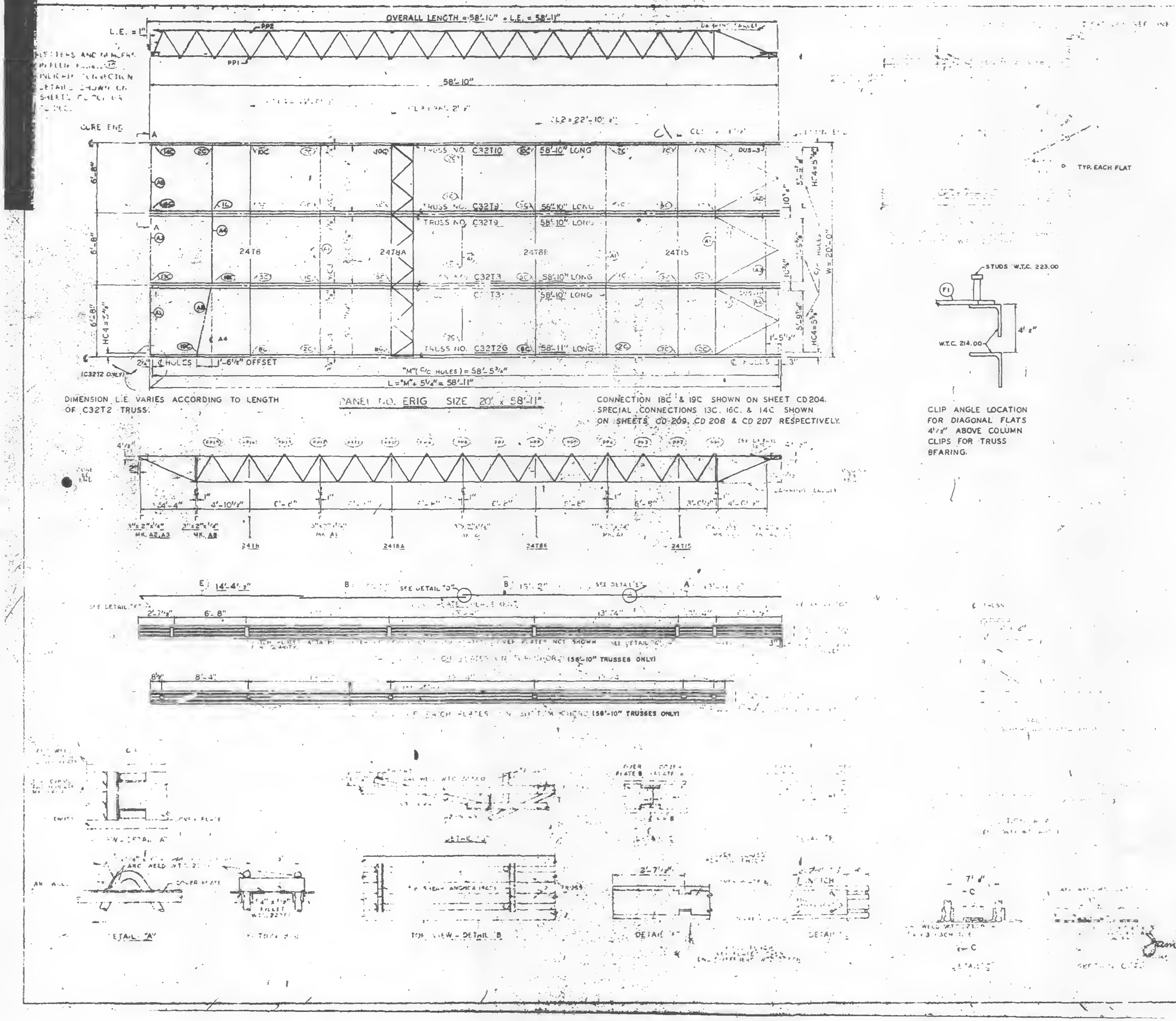
PANEL ERIA

James [illegible] 8/19/68

JULY 22, 1968

LACLEDE STEEL CO.

FP ERIA



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIG SIZE 20' x 58'-11"

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

(58'-10" TRUSSES ONLY)

					FF
	[illegible]		[illegible]	58'-11"	ST [illegible]
			[illegible]	58'-10"	[illegible] 203
			[illegible]	58'-10"	ST 209
			[illegible]	58'-10"	ST 210
	8		[illegible]	[illegible]	ST 208
	8A		[illegible]	[illegible]	ST 208A
	[illegible]		[illegible]	[illegible]	ST 208B
	[illegible]		24T15	[illegible]	ST 215
3" x 2" x 1/4" ANGLE		4	[illegible]		ST 403
	A2	4	[illegible]		ST 403
	A3		[illegible]		ST 403
	A4	1	3" x 2" x 1/4" x 13'-3"		ST 403
	A8	1	3" x 2" x 1/4" x [illegible]		ST 405
DIAGONAL FLATS	F1	6	1 1/2" x [illegible]" x 8'-8"		ST 402
	[illegible]		[illegible]		ST [illegible]
			[illegible]		ST [illegible]
			[illegible] x 14'-4 1/2"		ST [illegible]
ANGLE CLIPS	C1	20	[illegible] x 0'-6"		ST 400
	C2	4	[illegible]		ST 400
[illegible]	[illegible]	2	[illegible]		ST 298
	[illegible]		[illegible]		ST [illegible]
CONNECTION BAR	[illegible]	1	[illegible]		ST 400
	CB2		[illegible] x 1'-3"		ST 400
	[illegible]	6	[illegible] x 1'-5"		ST [illegible]
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"		ST 400
	P2	1	4 1/2" x .39" x 0'-9"		ST 400
	P3	1	4 1/2" x .39" x 1'-0"		ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"		ST 400
	P6	1	4 1/2" x .39" x 0'-9"		ST 401
8 SHEAR ANCHOR	SA2	8	8 REBARS x 0'-9"		ST 400
PATCH PLATES	PF1	18	2" x 1/4" x 0'-3"		ST 400
	PF2	18	3" x 3/4" x 0'-3"		ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

[illegible] 3 & 10	4-15-68
[illegible] 12	5-10-68
[illegible]	[illegible]-68
[illegible] 5 & 6	[illegible]-68
[illegible]	4-[illegible]-68
[illegible] L	10-20-68
[illegible] J	4-15-68
[illegible] 6, 7 & 8	9-10-68

10-11,39 (NORTH)

ERIG x 58'-11"

[illegible] 12 5-10-68

James [illegible] 8/19/68

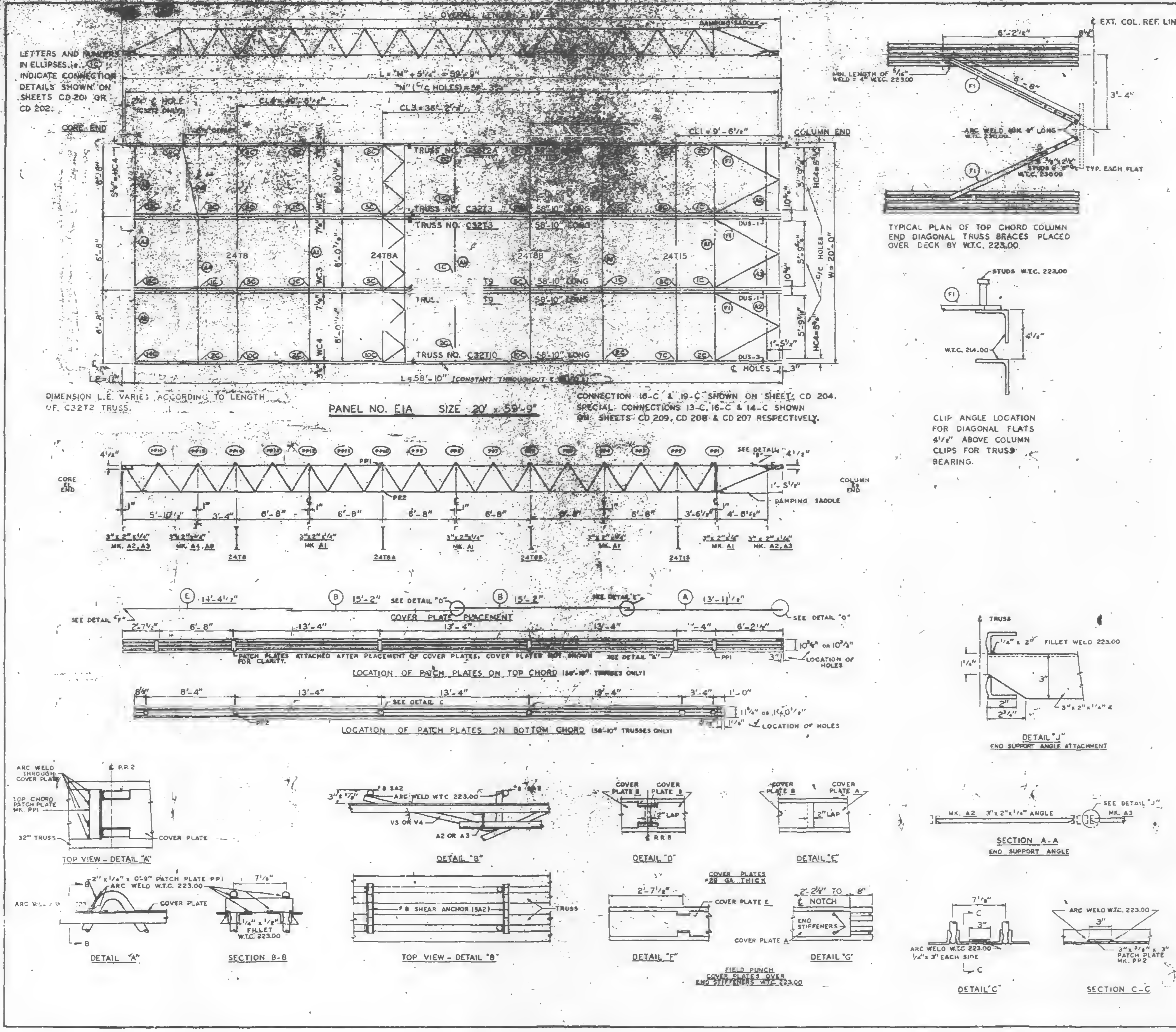
JULY 22, 1968

DATE JULY 22, 1968

[illegible] STEEL CO.

221

FP ERIG

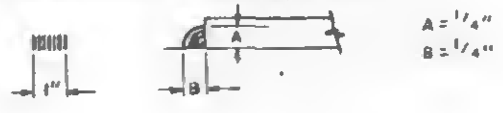


OVERALL LENGTH
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.
L = "M" + 5¹/₄" = 59'-9"
"N" (C/C HOLES) = 58'-3"
CL4 = 40'-6¹/₂"
CL3 = 36'-2¹/₂"
CL1 = 9'-6¹/₂"
CORE END
COLUMN END
TRUSS NO. C32T2A
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
WC2
WC3
WC4
DUS-1
DUS-3
HC4 = 5¹/₂"
C/C HOLES W = 20'-0"
€ HOLES
L = 58'-10" (CONSTANT THROUGHOUT E-SERIES)
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. E1A SIZE 20' x 59'-9"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
PP1
PP2
SEE DETAIL "D"
5'-10¹/₂"
3'-4"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6¹/₂"
4'-6⁵/₈"
1'-5¹/₂"
DAMPING SADDLE
3" x 2" x ¹/₄" MK. A2, A3
3" x 2" x ¹/₄" MK. A4, A8
3" x 2" x ¹/₄" MK. A1
3" x 2" x ¹/₄" MK. A1
3" x 2" x ¹/₄" MK. A1
3" x 2" x ¹/₄" MK. A1
3" x 2" x ¹/₄" MK. A2, A3
24T8
24T8A
24T8B
24T15
E 14'-4¹/₂"
B 15'-2"
B 15'-2"
A 13'-11¹/₂"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "G"
COVER PLATE PLACEMENT
2'-7¹/₂"
6'-8"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2¹/₄"
10³/₄" or 10⁵/₈"
3"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
8³/₄"
8'-4"
13'-4"
13'-4"
13'-4"
3'-4"
1'-0"
SEE DETAIL C
11³/₄" or 10⁷/₈"
1¹/₈"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
6'-2¹/₂"
8¹/₄"
€ EXT. COL. REF. LINE
MIN. LENGTH OF ⁵/₁₆" WELD = 4" W.T.C. 223.00
6'-8"
3'-4"
ARC WELD MK. 4" LONG W.T.C. 230.00
STUDS W.T.C. 230.00
TYP. EACH FLAT
F1
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 223.00
W.T.C. 214.00
4¹/₂"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4¹/₂" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TRUSS
¹/₄" x 2" FILLET WELD 223.00
1¹/₄"
3"
2"
2³/₄"
3" x 2" x ¹/₄" ∠
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
€ P.P.2
TOP VIEW - DETAIL "A"
3" x 1⁷/₈"
#8 SA2
ARC WELD WTC 223.00
V3 OR V4
A2 OR A3
DETAIL "B"
COVER PLATE B
COVER PLATE B
2" LAP
P.P. 8
DETAIL "D"
COVER PLATE B
COVER PLATE A
2" LAP
DETAIL "E"
MK. A2 3" x 2" x ¹/₄" ANGLE
SEE DETAIL "J"
MK. A3
SECTION A-A
END SUPPORT ANGLE
2" x ¹/₄" x 0'-9" PATCH PLATE PP1
ARC WELD W.T.C. 223.00
COVER PLATE
DETAIL "A"
7¹/₂"
¹/₄" x 1¹/₂" FILLET W.T.C. 223.00
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW - DETAIL "B"
COVER PLATES #29 GA. THICK
2'-7¹/₂"
COVER PLATE E
DETAIL "F"
2'-2¹/₄" TO 8"
€ NOTCH
END STIFFENERS
COVER PLATE A
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
7¹/₂"
3"
ARC WELD W.T.C. 223.00 ¹/₄ x 3" EACH SIDE
DETAIL "C"
ARC WELD W.T.C. 223.00
3"
3" x ³/₈" x 3" PATCH PLATE MK. PP2
SECTION C-C

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2A	1	C32T2A - 58'-9"	ST 202A
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	BT 208
	T8A	1	24T8A - 19'-11"	BT 208A
	T8B	1	24T8B - 19'-11"	BT 208B
	T15	1	24T15 - 19'-11"	BT 215
3" x 2" x ¹/₄" ANGLE	A1	4	3" x 2" x ¹/₄" x 19'-11"	ST 403
	A2	4	3" x 2" x ¹/₄" x 5'-11⁵/₈"	ST 403
	A3	2	3" x 2" x ¹/₄" x 5'-11⁵/₈"	ST 403
	A4	1	3" x 2" x ¹/₄" x 13'-3"	ST 403
	A8	1	3" x 2" x ¹/₄" x 6'-8⁵/₈"	ST 403
DIAGONAL FLATS	F1	6	1¹/₂" x ³/₈" x 6'-8"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11¹/₂"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-4¹/₂"	ST 303
ANGLE CLIP	C1	20	2" x 1¹/₂" x ¹/₄" x 0'-8"	ST 400
	C2	4	2¹/₂" x 1¹/₂" x ¹/₄" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3¹/₂" x 3¹/₂" x ³/₈" x 3'-6⁷/₈"	ST 298
	DUS-3	1	3¹/₂" x 3¹/₂" x ³/₈" x 3'-6⁷/₈"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1⁵/₁₆" ϕ x 1'-3"	ST 400
	CB3	8	1⁵/₈" ϕ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3¹/₂" x ³/₈" x 6¹/₂"	ST 400
	P2	1	4¹/₂" x .34" x 0'-9"	ST 400
	P3	1	4¹/₂" x .39" x 1'-0"	ST 400
	PS	3	4¹/₂" x ¹/₄" x 1'-8"	ST 400
	PC	1	4¹/₂" x .34" x 0'-4"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-3"	ST 400
PATCH PLATES	PP1	18	2" x ¹/₄" x 0'-9"	ST 400
	PP2	18	3" x ³/₈" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¹/₄" x 1" FULL THROAT FILLET.



REF. DRWGS.		
	7-AB2-3 & 10	4-15-68
	7-AB3-11	5-10-68
	7-AB4-3, 3.1 & 39	1-3-68
	7-AB4-15 & 18	5-6-68
	7-AB4-42	4-1-68
	SA-124	10-20-68
	7-AB1-3	4-15-68
	7-AB1-6, 7 & 8	5-10-68

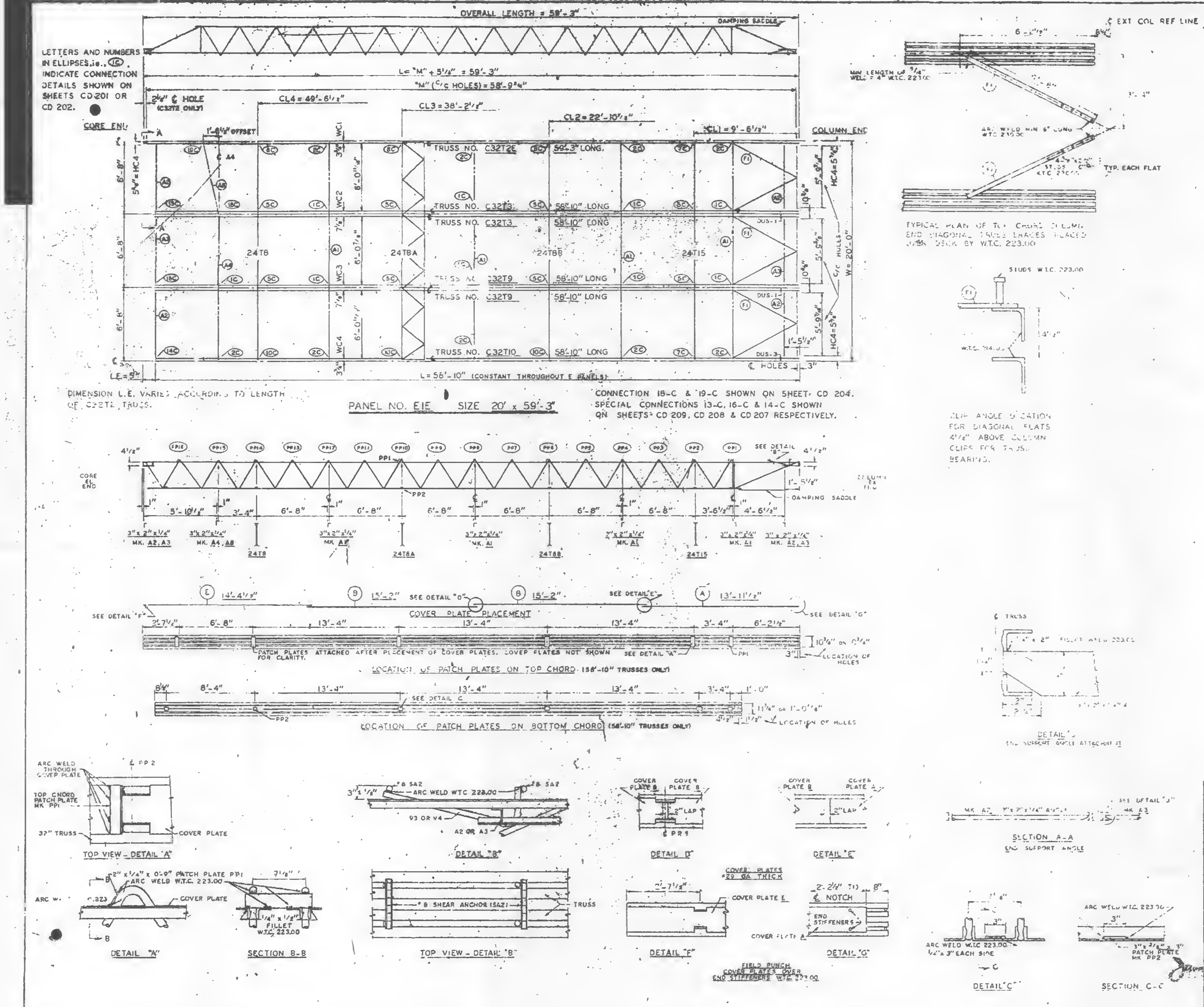
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68, 69 (NORTH)
PANEL E1A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-11 5-10-68	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A	DATE 8/16/68	DRAWN BY gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JULY 22, 1968	IN CHARGE OF PROD. DE.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO. WTC 221	SHEET NO. FP E1A

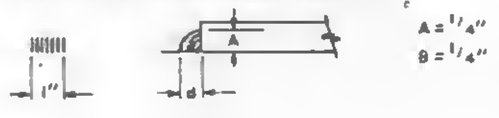
LETTERS AND NUMBERS IN ELLIPSES, i.e., ⑯ INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.


OVERALL LENGTH = 59'-3"
DAMPING SADDLE
L = "M" + 5½" = 59'-3"
"M" (C/C HOLES) = 58'-9¾"
2¼" ℄ HOLE (C32T2E ONLY)
CL4 = 49'-6½"
CL3 = 38'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T2E 59'-3" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T10 58'-10" LONG
24T8
24T8A
24T8B
24T15
W = 20'-0"
L = 58'-10" (CONSTANT THROUGHOUT E PANELS)
℄ HOLES
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. E1E SIZE 20' x 59'-3"
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
℄ EXT COL REF LINE
TYPICAL PLAN OF TOP CHORD AT COLUMN END DIAGONAL TRUSS BRACES PLACED UPON DECK BY W.T.C. 223.00
TYP. EACH FLAT
STUDS W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARINGS.
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
LOCATION OF HOLES
DETAIL "J"
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "D"
DETAIL "E"
SECTION A-A
END SUPPORT ANGLE
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "F"
COVER PLATES #29 GA THICK
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "C"
SECTION C-C

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T2E	1	C32T2E - 59'-3"	ST 202E
	T3	2	C32T3 - 58'-10"	ST 202
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3"x 2"x¼" ANGLE	A1	4	3"x 2"x¼"x 19'-11"	ST 403
	A2	4	3"x 2"x¼"x 5'-11⅝"	ST 403
	A3	2	3"x 2"x¼"x 5'-11⅝"	ST 403
	A4	1	3"x 2"x¼"x 19'-3"	ST 403
	A8	1	3"x 2"x¼"x 6'-9¾"	ST 403
DIAGONAL FLATS	F1	6	1½"x ⅜"x 6'-9"	ST 402
COVER PLATES	A	3	9"x.0135"x 13'-11½"	ST 303
	B	6	9"x.0135"x 15'-2"	ST 303
	E	3	9"x.0135"x 14'-4½"	ST 303
ANGLE CLIPS	C1	26	2"x 1½"x¼"x 0'-8"	ST 400
	C2	4	2½"x 1½"x¼"x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x 3½"x ⅜"x 3'-8⅞"	ST 298
	DUS-3	1	3½"x 3½"x ⅜"x 3'-8⅞"	ST 298
CONNECTION BAR	CB1	1	1" ⌀ x 1'-3"	ST 400
	CB2	6	1⅛" ⌀ x 1'-3"	ST 400
	CB3	6	1⅝" ⌀ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3½"x ⅜"x 0'-[illegible]"	ST 400
	P3	1	4½"x .33"x 0'-[illegible]"	ST 400
	P2	1	4½"x .33"x 1'-0"	ST 400
	P5	3	4½"x ¼"x 1'-6"	ST 400
	P6	1	4½"x .[illegible]"x 0'-[illegible]"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-[illegible]"	ST 400
PATCH PLATES	PP1	18	2"x ¼"x 0'-9"	ST 400
	PP2	18	3"x ⅜"x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

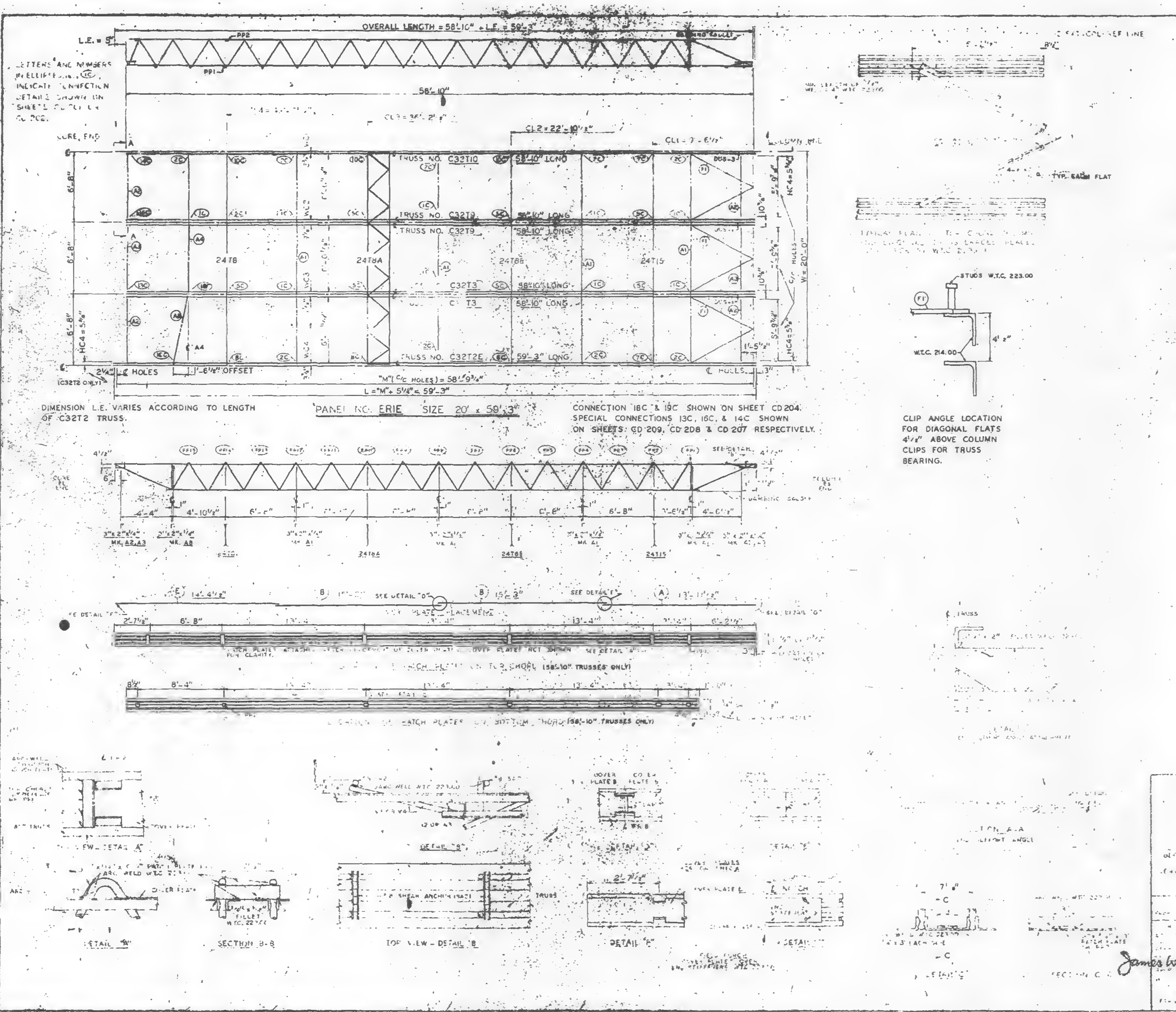

A = ¼"
B = ¼"

FILE DRWGS.	
7-A82-9 & 10	4-15-68
7-A83-11	5-10-68
7-A84-3, 3.1 & 39	1-3-68
7-A84-15 & 16	5-6-68
7-A84-42	4-1-66
SA-124	10-20-68
7-A81-3	4-15-66
7-A81-6, 7 & 8	5-10-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
E8 (NORTH)
PANEL E1E - 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR PONYA James White DATE 8/19/68
APPROVED FOR FABRICATION BY FOR FABRICATION DATE
LACLEDE STEEL CO.
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO 7 A83-11 5-10-68
DRAWN BY adc DATE JULY 22, 1968
CHECKED BY T.M. CHURA DATE JULY 22, 1968
FABRICATION CONT NO W.T.C. 221
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO. FP E1E


OVERALL LENGTH = 58'-10" + L.E. = 59'-3"
L.E. = 5"
PP2
PP1
58'-10"
LETTERS AND NUMBERS IN ELLIPSE, (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS [illegible] CD 202.
CORE END
CL3 = 36'-2"
CL2 = 22'-10 1/2"
CL1
COLUMN LINE
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
24T8
24T8A
24T8B
24T15
C32T3 58'-10" LONG
C32T3 58'-10" LONG
TRUSS NO. C32T2E 59'-3" LONG
6'-8"
6'-8"
6'-8"
HC4 = 5 3/4"
W = 20'-0"
1'-5 1/2"
2 1/4" ℄ HOLES
(C32T2 ONLY)
1'-6 1/2" OFFSET
℄ HOLES
"M" (C/C HOLES) = 58'-9 3/4"
L = "M" + 5 1/4" = 59'-3"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. ERIE SIZE 20' x 59'-3"
CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS: CD 209, CD 208 & CD 207 RESPECTIVELY.
4 1/2"
6"
SEE DETAIL "D"
4'-4"
4'-10 1/2"
6'-8"
6'-8"
6'-8"
4'-0 1/2"
3"x2"x1/4" MK. A2, A3
2 1/2"x2"x1/4" MK. A8
MK. A1
24T8A
24T8B
24T15
14'-4 1/2"
SEE DETAIL "D"
SEE DETAIL "E"
13'-11 1/2"
COVER PLATE PLACEMENT
2'-7 1/2"
6'-8"
13'-4"
13'-4"
6'-2 1/2"
PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)
8'-4"
13'-4"
13'-4"
PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "B"
DETAIL "E"
DETAIL "F"
SHEAR ANCHOR (SA2)
TRUSS
COVER PLATE B
COVER PLATE E
W.T.C. 223.00
2'-7 1/2"
SECTION A-A
7'-8"
TYP. EACH FLAT
STUDS W.T.C. 223.00
F1
W.T.C. 214.00
4'-2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

[illegible]			SIZE	REF. DRWG.
	2E		[illegible] 59'-3	ST 202E
	3		[illegible] 58'-10"	ST 203
	[illegible]		[illegible] 58'-10"	ST 209
	10		C32T10 58'-10"	ST 210
	[illegible]		24T8 [illegible]	HT 208
	8A		24T8A [illegible]	ST 208A
	8B	1	24T8B [illegible]	ST 208B
	T5		24T15 [illegible]	ST 215
3"x2"x1/4" ANGLE	[illegible]	6	3"x2"x1/4"x [illegible]	ST 403
	A2	4	3"x2"x1/4"x 5'-[illegible]	ST 403
	A3	2	3"x2"x1/4"x [illegible]	ST 403
	A4	1	3"x2"x1/4"x 13'-3"	ST 403
	A8	1	3"x2"x1/4"x 6'-8 3/8"	ST 405
DIAGONAL FLAT	F1	6	1 1/2"x5/8"x6'-8"	ST 402
[illegible]	A	[illegible]	9"x 0.135" x 13'-11 1/2"	ST 303
	B	[illegible]	9"x 0.135" x 18'-[illegible]"	ST 303
	E	3	9"x 0.135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	20	2"x1 1/2"x1/4"x 0'-6"	ST 400
	C2	4	2 1/2"x1 1/2"x1/4"x 0'-[illegible]"	ST 400
[illegible] PLATE	[illegible]	2	3 1/2"x3 1/2"x[illegible]	ST 208
	[illegible]	[illegible]	3 1/2"x3 1/2"x[illegible]	ST 208
CONNECTION BAR	CB1	1	1" ⌀ x [illegible] 3"	ST 400
	CB2	3	1 7/8" ⌀ x 1'-3"	ST 400
	CB3	6	1 7/8" ⌀ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2"x3/8"x6 1/2"	ST 400
	P2	1	4 1/2"x.39"x0'-9"	ST 400
	P3	1	4 1/2"x.39"x1'-0"	ST 400
	P5	3	4 1/2"x1/4"x1'-8"	ST 400
	P6	1	4 1/2"x.39"x0'-9"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
PATCH PLATES	PP1	16	2"x1/4"x0'-9"	ST 400
	PP2	18	3"x3/8"x0'-[illegible]"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

ADD 4, 5 & 6 — 4-16-68
ADD 4, 42 — 4-16-68
[illegible] — 4-26-68
ADD 3 — 4-15-68
ADD 6, 7 & 8 — 5-10-68

10-11 (SOUTH)

ERIE

[illegible] COMPANY

[illegible] 12 5-10-68

8/19/68

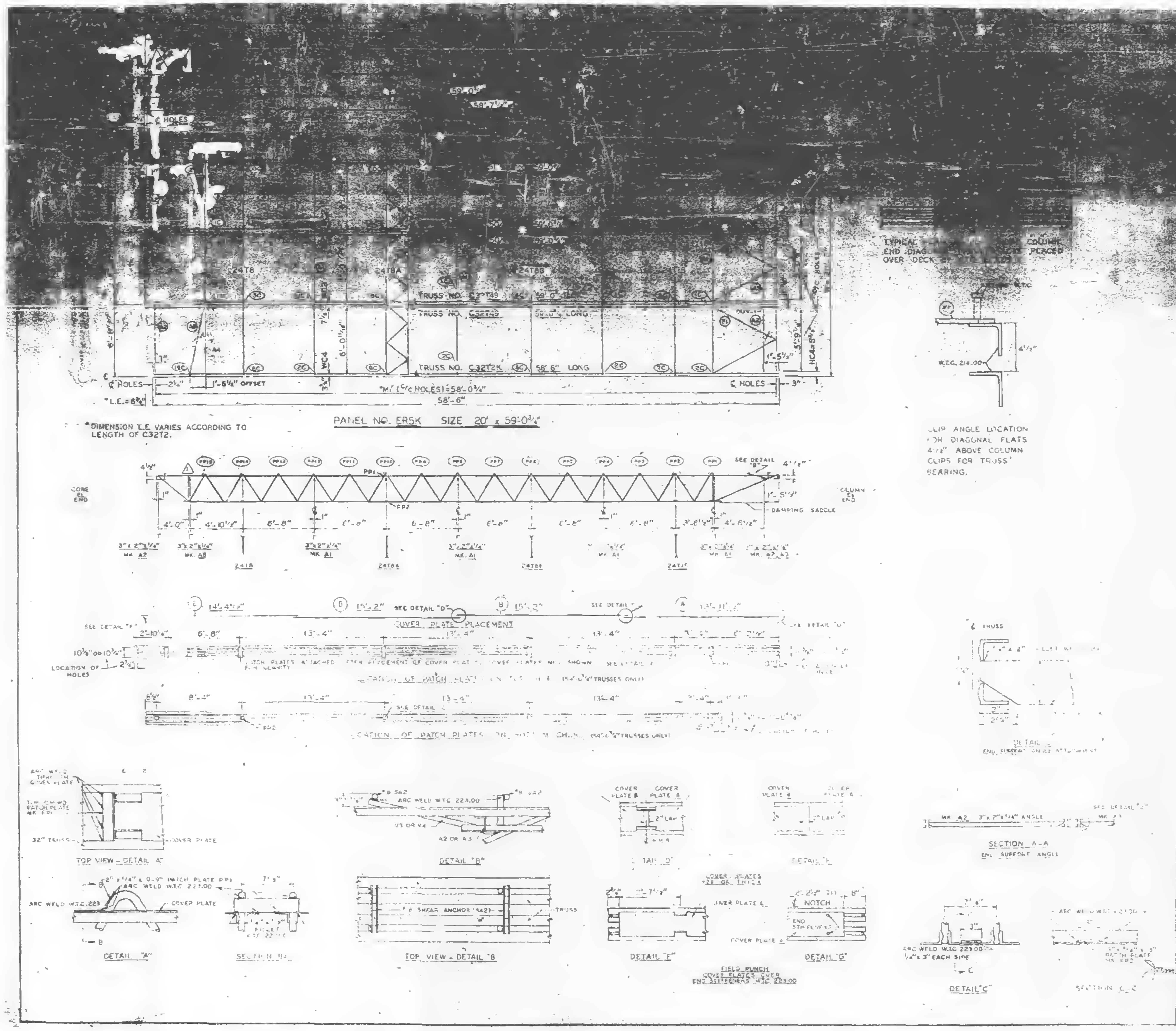
James White

JULY 22, 1968

JULY 22, 1968

LACLEDE STEEL CO.

ERIE


PANEL NO. ER5K SIZE 20' x 59'-0 3/4"
* DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
TRUSS NO. C32T2K 58'-6" LONG
58'-6"
℄ HOLES
"L.E.=6 3/4"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-6 3/4" TRUSSES ONLY)
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS' BEARING.
TYPICAL END DIAGONAL ... COLUMN ... PLACED OVER DECK
W.T.C. 214.00
DAMPING SADDLE
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "D"
SECTION A-A
END SUPPORT ANGLE
DETAIL "A"
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "F"
DETAIL "G"
NOTCH
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
DETAIL "C"
SECTION C-C
ARC WELD W.T.C. 223.00

[illegible]	[illegible]	[illegible]	[illegible]
ANGLE CLIPS	C1	[illegible]	ST 400
	C2	4	3 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DS-1	2	[illegible]	[illegible]
	DS-3	1	[illegible]	[illegible]
CONNECTION BAR	CB1	1	1" ⌀ x 1'-3"	ST 400
	CB2	6	1 1/4" ⌀ x 1'-3"	ST 400
	CB3	6	1 3/8" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-4"	ST 400
PATCH PLATES	PP1	16	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY
1	3-11-68	LOCATION OF PATCH PLATE	G.O.C.

REF. DRWGS.

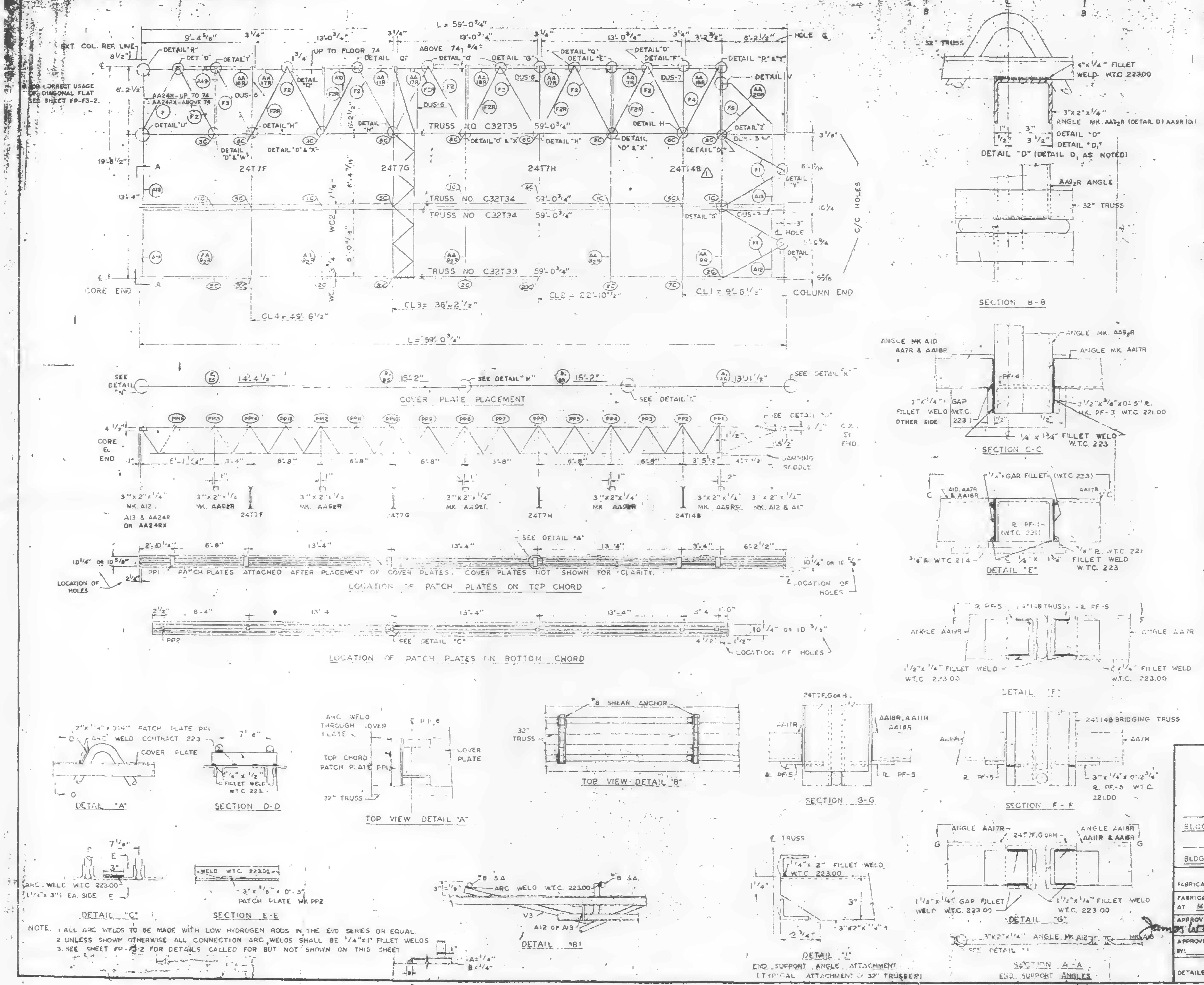
2-AB2-1	7-22-68
1-A5-74	11-25-68
1-AB4-1	10-15-68
2-AB4-5 & 6	7-22-68
1-AB4-42	10-15-68
SA-12	10-11-68
1-AB1-3	7-22-68
1-581-24,45 & 46	11-25-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 & 46 (SOUTH)
PANEL ER5K - 20' x 59'-0 3/4"

PREPARED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 583.74
PLATE
APPROVED FOR FABRICATION FOR PONYA Jimmy White DATE 3/24/69
DRAWN BY
DATE JAN 15, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA
DATE JAN 15, 1969
IN CHARGE OF PROD. DEPT.
LACLEDE STEEL CO.
DETAILED BY E. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
FP ER5K

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. ⓘⒸ.
SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 229.



NOTE. 1 ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2 UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F3-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T34	2	C32T34 - 59'-0 3/4"	ST 234
	T35	1	C32T35 - 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F - 19'-6"	ST 207F
	T7G	1	24T7G - 19'-6"	ST 207G
	T7H	1	24T7H - 19'-6"	ST 207H
	T14B	1	24T14B - 19'-6"	ST 214B
3"x2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x2' 5/16"	ST404
	A13	2	3"x2"x1/4"x6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x5'-11 11/16"	ST404
	A49	1	3"x2"x1/4"x6'-0"	ST413
ANGLE ASSEMBLY **(AA24R IS REPLACED BY AA24RX ABOVE FLOOR 74)	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA9₂R	4	SEE REF. DRWG.	ST406
	AA11R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST400
	AA19R	1	SEE REF. DRWG.	ST400
	**AA24R	1	SEE REF. DRWG.	ST412
DIAGONAL FLATS	F1	4	1 1/2"x [illegible]"x 6'-8"	ST402
	F2 F2R	7	1 1/2"x [illegible]"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x [illegible]"x 4'-[illegible]"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST400
	PP2	6	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x 0.135"x 13'-11 1/2"	ST303
	B	2	9"x 0.135"x 15'-2"	ST303
	E	1	9"x 0.135"x 14'-4 1/2"	ST303
	AS	1	3 1/2"x 0.135"x 13'-11 1/2"	ST303
	BS	2	3 1/2"x 0.135"x 15'-2"	ST303
	ES	1	3 1/2"x 0.135"x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	4	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST400
	C1	12	2"x 1 1/2"x 1/4"x 0'-6"	ST400
DAMPING SADDLE	DUS-5		3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-3	6	3 1/2"x 3/8"x 0'-[illegible]"	ST400
CONN. ANGLE	C5	1	3"x 2"x .37"x 0'-3"	ST 413
FLAT ASSEMBLY	FB8R	*	SEE REF. DRWG.	ST 415
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST 400
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG.	ST405

△1	8-4-69	AS NOTED	C.U.C
NO	DATE	REVISION	BY

REF. DRWGS

7-AB1-30	1-6-69	SA-124	1-6-69
7-AB1-31	1-6-69	7-AB4-14,14.1	10-15-68
7-AB1-32	1-6-69	7-AB4-15,16	7-22-68
7-AB2-16	1-6-69	7-AB4-21	7-22-68
7-AB3-5	1-6-69	7-AB4-23-25	7-22-68
7-AB3-41	1-6-69	7-AB4-29	1-3-68
7-AB3-52	1-6-69	7-AB4-39-41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB4-45	12-20-68

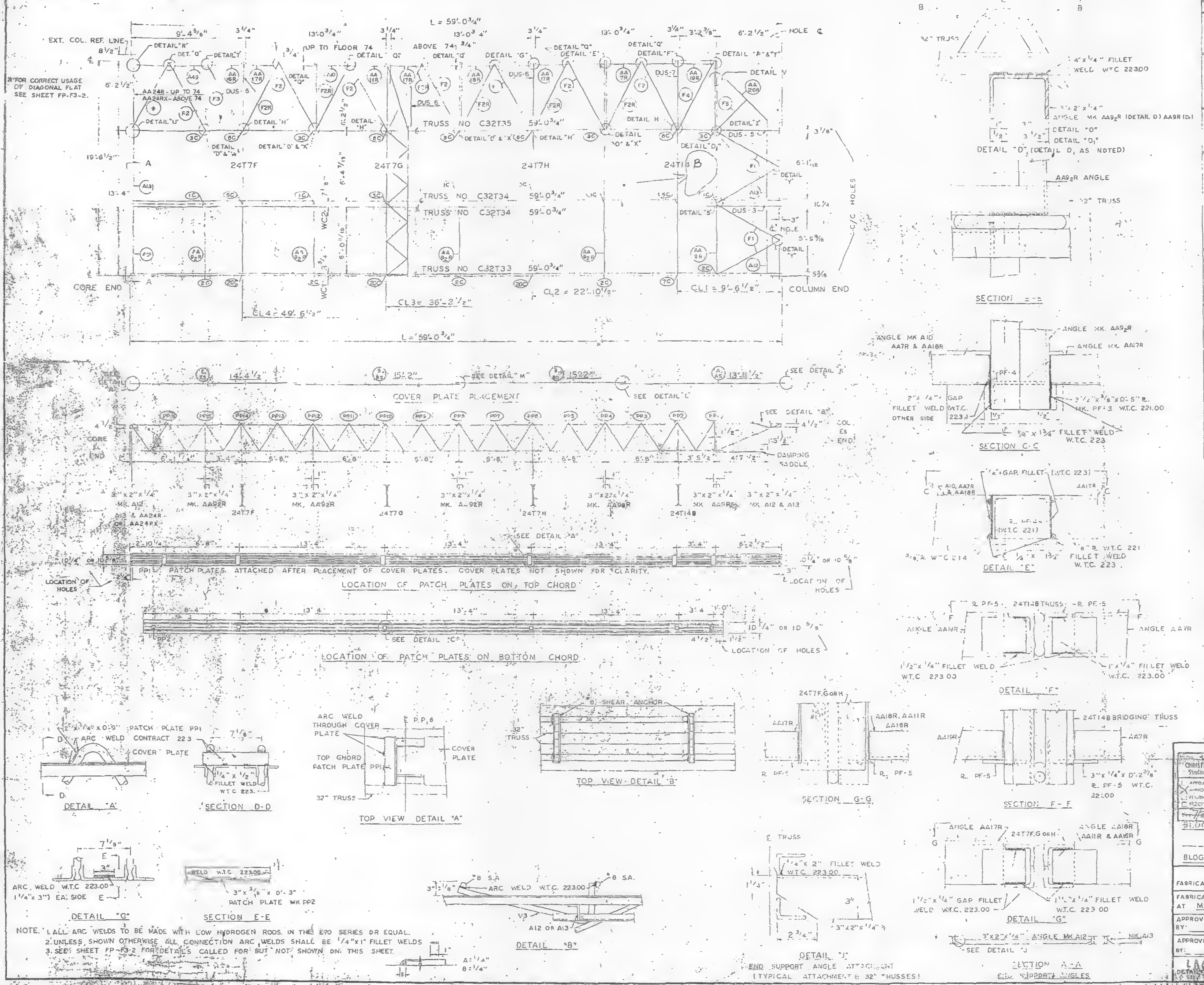
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 78 (NORTH & SOUTH) 44 (NORTH ONLY)
PANEL FR3 19'-6" x 59'-0 3/4"
BLDG B FLOORS 44 & 78 (NORTH & SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-52	PLATE
APPROVED FOR FABRICATION BY: James [illegible] FOR P.O.N.Y.A.	DATE 8/11/69	DRAWN BY: C.U.C. DATE APRIL 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE APRIL 7, 1969	IN CHARGE OF PROD. DEV.
[redacted] DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR3

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (1C). SHOWN ON SHEETS CD 201, CD 202, CD 204, & CD 229.


EXT. COL. REF. LINE
*FOR CORRECT USAGE OF DIAGONAL FLAT SEE SHEET FP-F3-2.
L = 59'-0 3/4"
TRUSS NO C32T35 59'-0 3/4"
TRUSS NO C32T34 59'-0 3/4"
TRUSS NO C32T33 59'-0 3/4"
24T7F
24T7G
24T7H
24T14B
CORE END
COLUMN END
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
C/C HOLES
COVER PLATE PLACEMENT
DAMPING SADDLE
PP1 PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
DETAIL "D" (DETAIL D1 AS NOTED)
SECTION C-C
DETAIL "E"
DETAIL "F"
SECTION G-G
SECTION F-F
DETAIL "G"
DETAIL "A"
SECTION D-D
TOP VIEW DETAIL "A"
TOP VIEW DETAIL "B"
DETAIL "C"
SECTION E-E
DETAIL "B"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT (TYPICAL ATTACHMENT @ 32" TRUSSES)
SECTION A-A
END SUPPORT ANGLES
ARC WELD W.T.C 223.00 (1/4"x 3") EA. SIDE
3"x 3/8"x 0'-3" PATCH PLATE MK PP2

NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS. IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F3-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T34	2	C32T34 - 59'-0 3/4"	ST 234
	T35	1	C32T35 - 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F - 19'-6"	BT207F
	T7G	[illegible]	24T7G - 19'-6"	BT207G
	T7H	1	24T7H - 19'-6"	BT207H
	T14B	1	24T14B - 19'-6"	BT2148
3"x 2"x 1/4" ANGLES	[illegible]	[illegible]	[illegible] 5/16"	ST404
	A 3	2	3"x 2"x 1/4"x 6'-3 7/16"	ST404
	[illegible]	2	3"x 2"x 1/4"x 5'-11 11/16"	ST404
	A49	1	3"x 2"x 1/4"x 6'-0 11/16"	ST413
ANGLE ASSEMBLY **(AA24R IS REPLACED BY AA24RX ABOVE FLOOR 74)	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA9₂R	4	SEE REF. DRWG.	ST406
	AA11R	[illegible]	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST400
	AA19R	1	SEE REF. DRWG.	ST400
	**AA24R	1	SEE REF. DRWG.	ST412
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
	F2 F2R	7 6	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F3	[illegible]	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8"x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST400
	PP2	5	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x .0135"x 13'-11 1/2"	ST303
	B	2	9"x .0135"x 15'-2"	ST303
	E	1	9"x .0135"x 14'-4 1/2"	ST303
	AS	1	3 1/2"x .0135"x 13'-11 1/2"	ST303
	BS	2	3 1/2"x .0135"x 15'-2"	ST303
	ES	1	3 1/2"x .0135"x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	4	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST400
	C1	12	2"x 1 1/2"x 1/4"x 0'-6"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST299
	DUS-6	2	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-3	5	3 1/2"x 3/8"x 0'-[illegible]"	ST400
CONN. ANGLE	C5	1	3"x 2"x .37"x 0'-3"	ST 413
FLAT ASSEMBLY	F8BR	*	SEE REF. DRWG.	ST 415
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST 400
CORNER - ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG.	ST405

NO	DATE	REVISION	BY

REF. DRWG.

7-AB1-30	1-6-69	SA-124	1-6-69
7-AB1-31	1-6-69	7-AB4-14,14.1	10-15-68
7-AB1-32	1-6-69	7-AB4-15,16	7-22-68
7-AB2-16	1-6-69	7-AB4-21	7-22-68
7-AB2-9	1-6-69	7-AB4-23-25	7-22-68
7-AB3-41	1-6-69	7-AB4-29	1-3-68
7-AB3-52	1-6-69	7-AB4-39-41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB4-45	12-20-68

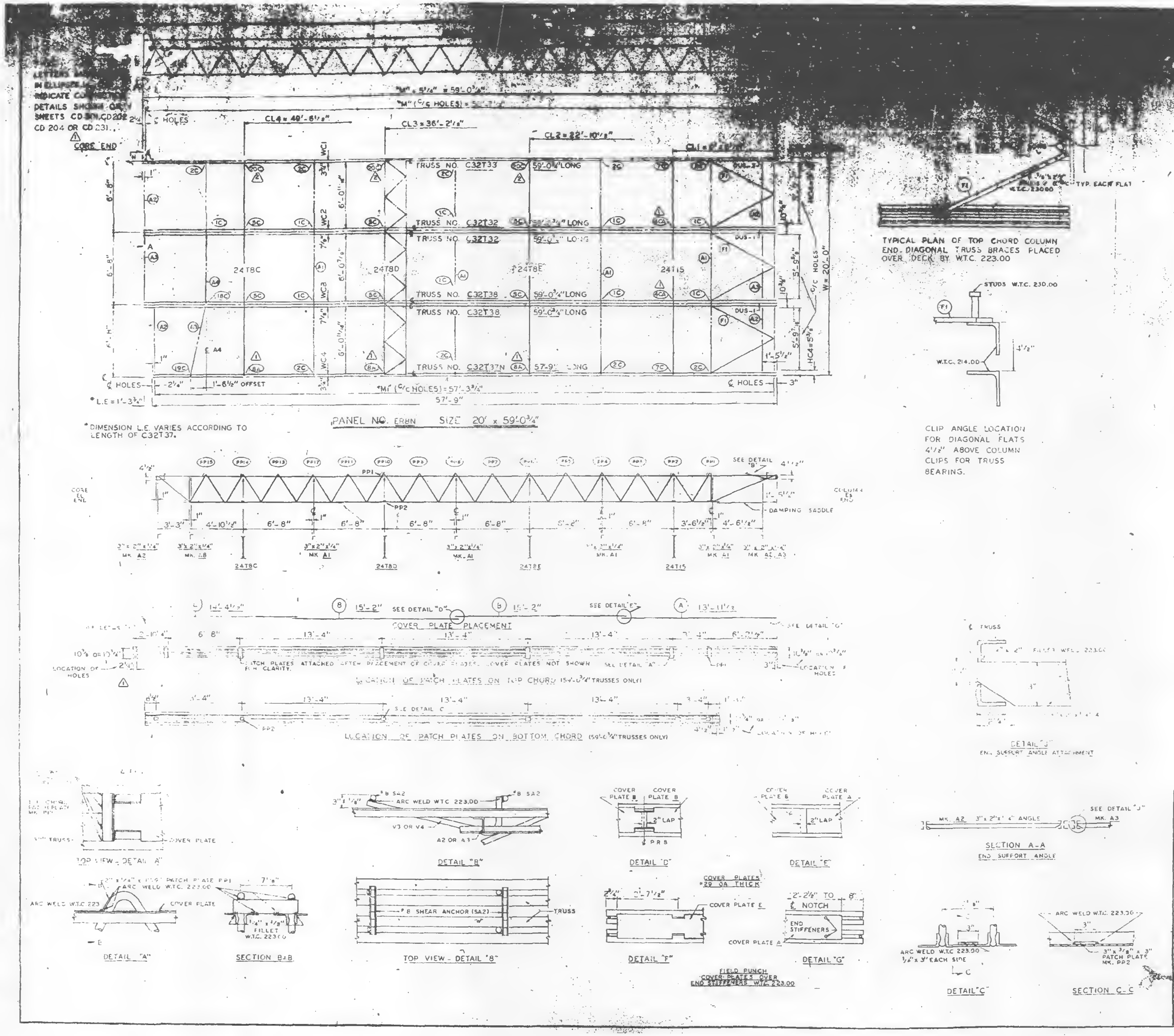
SKILLING - HELLE - CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECT
7/24/69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 78 (NORTH & SOUTH) 44 (NORTH ONLY)
PANEL FR3 19'-6" x 59'-0 3/4"
BLDG B FLOORS 44 & 78 (NORTH & SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-52	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: DATE APRIL 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY. T.M. CHURA DATE APRIL 7, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR3



MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T37N	1	C32T37N - 57'-	ST 237N
	T38	2	C32T38 - 59'-0 3/4"	ST 238
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	ST 208C
	T8D	1	24T8D - 19'-11"	ST 208D
	T8E	1	24T8E - 19'-11"	ST 208E
	T15	1	24T15 - 19'-11"	ST 215
3"x 2"x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-1"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-1"	ST 403
	A4	1	3" x 2" x 1/4" x	ST 403
	A8	1	3" x 2" x 1/4" x 6'	ST 403
DIAGONAL FLATS	F1	6	[illegible]	[illegible]
COVER PLATE	A	3	x .0135" x 13'-11 1/2"	ST 303
	B	4	x .0135" x 15'-2"	ST 303
	E	1	x .0135" x 4'-4 1/2"	ST 303
ANGLE CLIP	C1		2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	x 3/4" x 3'-8"	ST 298
	DUS-3	1	3 1/2" x 3/4" x 3'-6"	ST 299
CONNECTION BAR	CB1	1	1" ⌀ x 3"	ST 400
	CB2		7/8" ⌀ x 1'-3"	ST 400
CONNECTION PLATES △2	P15	6	6 1/2" x 1/2" x 2'-9"	[illegible]
		3	3 1/2" x	ST 400
	F	1	4 1/2" x	ST 400
	P3	1	4 1/2" x	ST 400
	F5			ST 400
	PF	1		ST 403
#8 SHEAR ANCHOR	SA2			ST 400
PATCH PLATES	PP1	16	3" x 1/4" x 0'-9"	ST 400
	PP2	8	3" x 3/8" x	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN THE CONNECTION ARC WELDS TO BE 1/4" x FULL THROAT FILLET.

A = 1/4"

NO.	DATE	REVISION	BY
△2	8-4-69	AS NOTED	G.D.C.
1	4-4-69	AS NOTED	G.D.C.

10	7-22-68
61	1-6-69
	10-15-68
	7-22-68
	10-15-68
	1-6-69
29 & 30	1-6-69
33 & 34	1-6-69
7-A82-19	1-6-69

WORLD TRADE CENTER

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (SOUTH ONLY)

PANEL ER8N - 20' x 59'-0 3/4"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. AB3 61

APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 8/11/69

DRAWN BY DATE APRIL 2, 1969

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

CHECKED BY T.N.CHUNG DATE APRIL 2, 1969

IN CHARGE OF PROD. REV

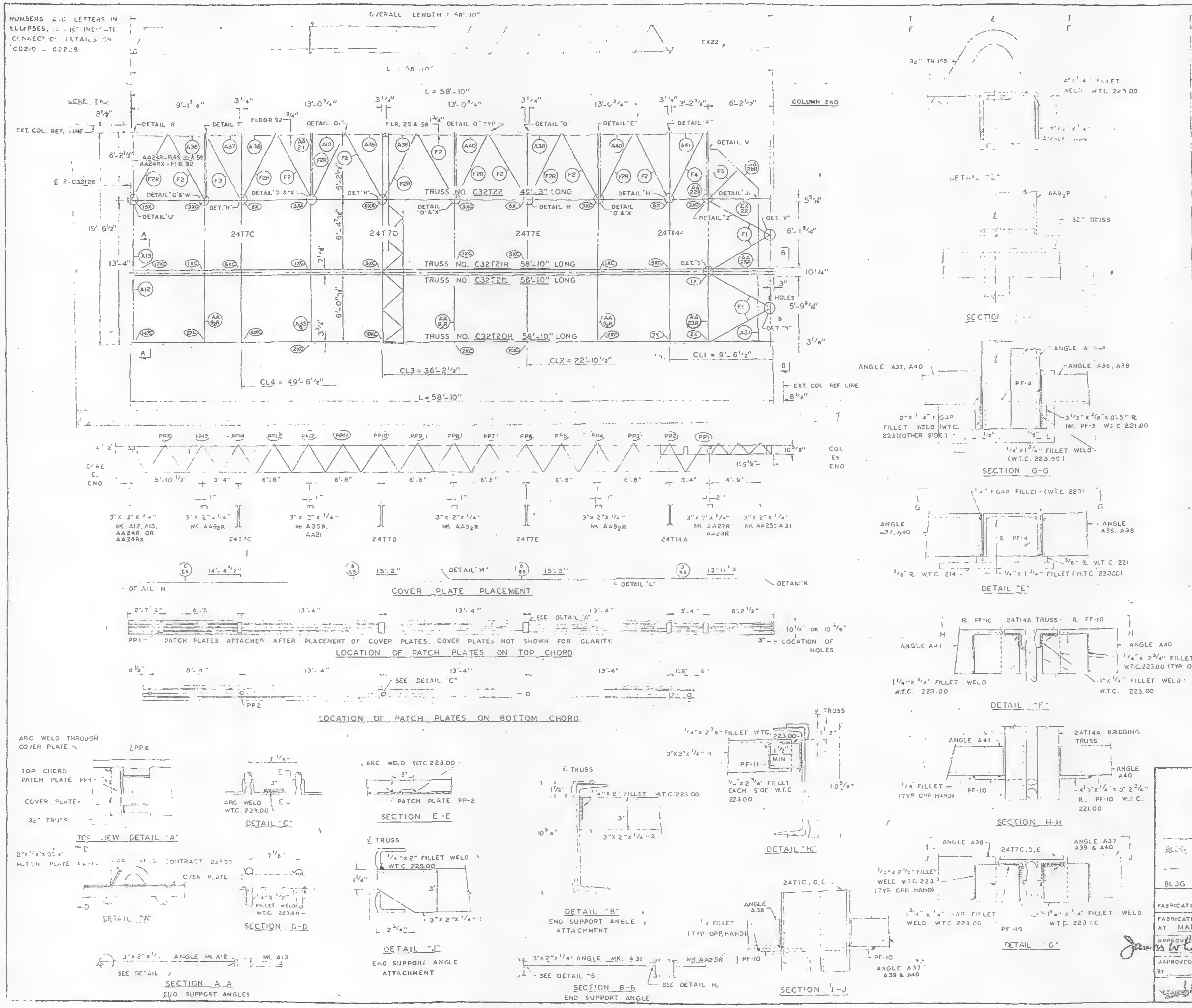
LACLEDE STEEL CO.

DETAILED BY A. CARL WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FP ER8N

NUMBERS AND LETTERS IN ELLIPSES, [illegible] INDICATE CONNECTION DETAILS ON CD210 – CD228



REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	#	SIZE	DRWG
FLOOR TRUSSES	T20R		C32T20R - 58'-10"	ST220L
	T21L		C32T21L - 58'-10"	ST221L
	T21R		C32T21R 58'-10"	
	T22	1	C32T22 - 58'-10"	ST222
BRIDGING TRUSSES	T7C	1	24T7C - 19'-6"	BT207C
	T7D		24T7D - 19'-6"	BT207D
	T7E		24T7E - 19'-6"	BT207E
	T14A		24T14A - 19'-6"	BT214A
3" x 2" x 1/4" ANGLES	A10	1	3" x 2" x 1/4" x 2'-7 15/16"	ST404
	A12		3" x 2" x 1/4" x 3'-11 1/16"	ST404
	A13		3" x 2" x 1/4" x 6'-3 7/16"	ST404
	A31	1	3" x 2" x 1/4" x 5'-8 1/8"	ST410
	A36		3" x 2" x 1/4" x 5'-11 1/2"	ST410
	A37		3" x 2" x 1/4" x 2'-0"	ST410
	A38	3	3" x 2" x 1/4" x 6'-4"	ST410
	A39	1	3" x 2" x 1/4" x 2'-9"	ST410
	A40	2	3" x 2" x 1/4" x 6'-2"	ST410
	A41	1	3" x 2" x 1/4" x 2'-10 3/4"	ST410
	A35	1	3" x 2" x 1/4" x 13'-3"	ST410
ANGLE ASSEMBLY *(ANGLE ASSEMBLY AA24R IS REPLACED BY AA24RX ON FLOOR 92).	AA21	1	SEE REF. DRWG.	ST411
	AA22	1	SEE REF. DRWG	ST411
	AA23R	1	SEE REF. DRWG.	ST411
	*AA24R	1	SEE REF DRWG.	ST412
	AA25R	1	SEE REF. DRWG.	ST412
	AA26R	1	SEE REF. DRWG.	ST412
	AA9₂R	3	SEE REF. DRWG.	ST404
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST400
	PP2	6	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST303
	Ks	1	3 1/2" x .0135" x 13'-11 1/2"	ST304
	B	2	9" x .0135" x 15'-2"	ST303
	Bs	1	3 1/2" x .0135" x 15'-2"	ST303
	Ls	1	3 1/2" x .0135" x 15'-2"	ST304
	E	1	9" x .0135" x 14'-4 1/2"	ST303
	Es	1	3 1/2" x .0135" x 14'-4 1/2"	ST303
ANGLE CLIPS**	C1	12	2" x 1 1/2" x .25" x 6"	ST400
	C2	3	2 1/2" x 1 1/2" x .25" x 6"	ST400
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
	F2 F2R	7	1 1/2" x 5/8" x 6'-10 1/2"	ST402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST402
	F4		1 1/2" x 5/8" x 7'-0"	ST402
	F5		1 1/2" x 5/8" x 4'-4"	ST402
MISC. PLATES	PF-1	2	1 1/2" x 1/2" x 0'-4"	ST400
	PF3	5	3 1/2" x 3/8" x 0'-5"	ST400
	PF-7	1	5" x 3/8" x 0'-4"	ST401
	PF8	5	3 1/2" x 1/4" x 0'-2 7/8"	ST401
	PF-10	8	4 1/2" x 1/4" x 0'-2 3/4"	ST401
	PF11	1	3" x 1/4" x 0'-2 3/8"	ST412
EXTENDED END	EX	1	SEE REF DRWG	ST222
	22			

** NUMBER OF PIECES OF ANGLES MK. C1 & C2 AS SHOWN WILL BE CORRECT AFTER FLOOR 92, TOWER "A".

NO.	DATE	REVISION	BY

SEE SHEET FP F2 2 FOR NOTES, REF DRWG & ADDITIONAL DETAILS

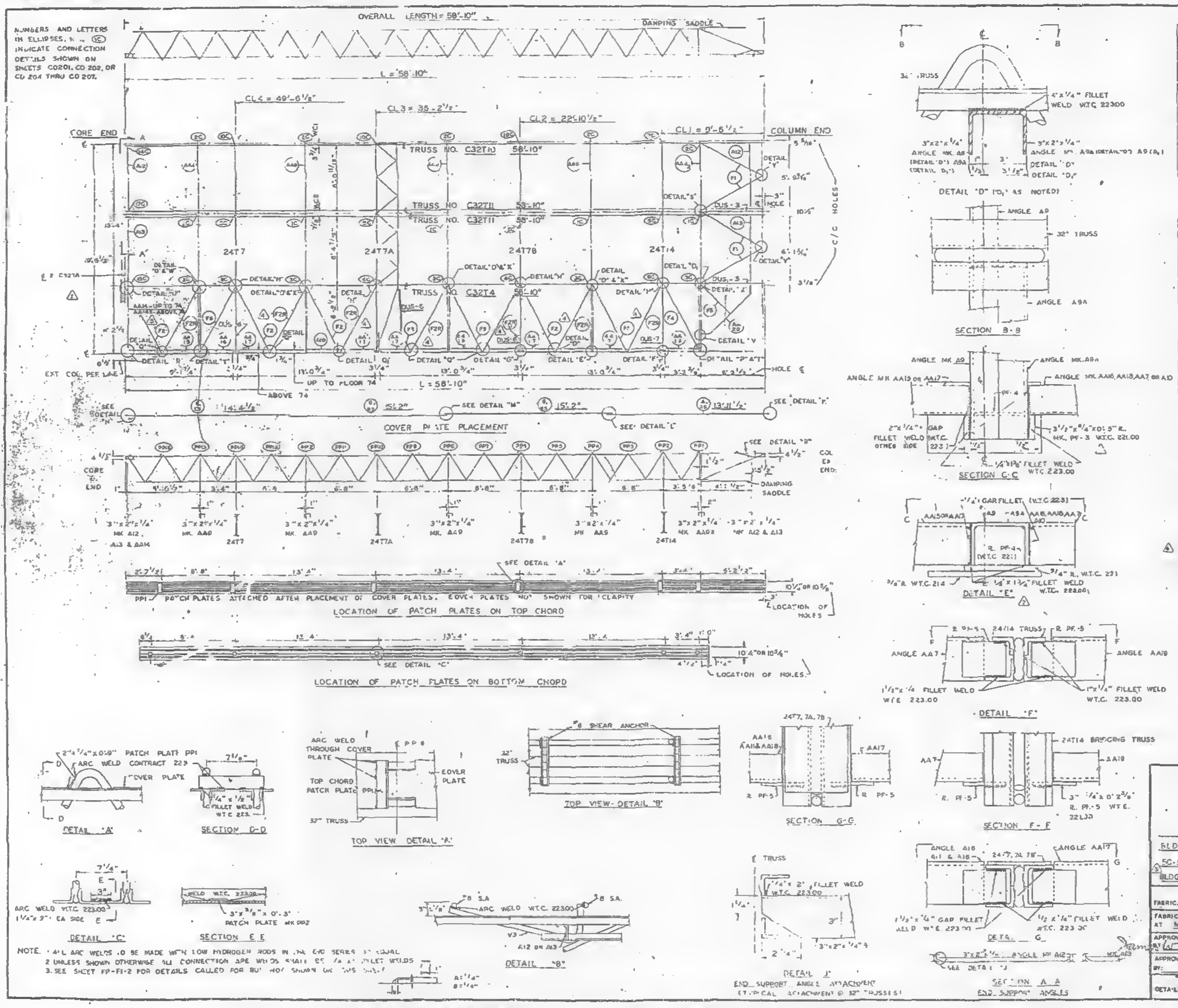
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59 & 92 (NORTH & SOUTH)
PANEL FR2 19'-6" x 58'-10"
BLDG B FLOORS 25, 59 & 92 (EAST & WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 A93	PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 6/20/69	DRAWN BY [illegible] DATE APRIL 7, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP - FR2

NUMBERS AND LETTERS IN ELLIPSES, [illegible] (5C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CO201, CO 202, OR CO 204 THRU CO 207.



NOTE. 1 ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2 UNLESS SHOWN OTHERWISE ALL CONNECTION ARE WELDS SHALL BE 1/4 x 1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-8"	BT207
	T7A	1	24T7A - 19'-8"	BT207A
	T7B	1	24T7B - 19'-8"	BT207B
	T14	1	24T14 - 19'-8"	BT214
3"x2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x2'-7 5/16"	ST404
	A13	2	3"x2"x1/4"x6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x5'-11 9/16"	ST404
ANGLE ASSEMBLY ** **AA14 IS REPLACED BY AA14X ABOVE FLR 74) 5	AA7	1	SEE REF. DRWGS.	ST404
	AA3	4	SEE REF. DRWS.	ST404
	[illegible]		SEE REF. DRWG	ST404
	[illegible]		SEE REF. DRWG	ST404
	[illegible]		[illegible] DRWG	ST404
	[illegible]		[illegible] DRWG	ST404
	[illegible]		[illegible]	[illegible]
	AA17	3	SEE REF. DRWG	ST404
	AA18	1	SEE REF DRWG	ST404
	AA19	1	SEE REF. DRWG	ST404
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 8'-8"	ST402
3	F2 F2R	1 2	1 1/2" x 5/8" x 8'-10 1/2"	ST402
	F3	1	1 1/2" x 3/8" x 8'-11 1/4"	ST402
	F4	1	1/2" x 3/8" x 7'-0	ST402
	F5	1	1/2" x 3/8" x 4'-4	ST402
PATCH PLATES	PP1	6	2 x 1/4 x 0'-9"	ST400
	PP2	5	3"x3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x 0.035 x 13'-11 1/2	ST303
	B	2	9"x 0.035"x 15'-2	ST303
	E	1	9"x 0.035"x 4'-4 1/2"	ST303
	As	1	3 1/2"x 0.035"x 13'-11 1/2"	ST303
	Bs	2	3 1/2"x 0.035"x 15'-2	ST303
	Es	1	3 1/2"x 0.035"x 4'-4 1/2"	ST303
ANGLE CLIPS* 4	C2	4	2 1/2"x 1 1/2"x 1/4"x 6"	ST400
	C1	12	2"x 1 1/2"x 1/4"x 0'-6"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8" 4'-3 6 3/8"	ST298
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2" x 0'-4"	ST400
	PF-2	[illegible]	5"x 3/4"x 4"	ST401
	PF-3	5	3 1/2"x 3/8"x 0'-2"	ST400
4 #8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-3"	ST 400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWS	ST405

*CLIP ANGLE CHANGE BECOMES EFFECTIVE WITH 33rd FLOOR, TOWER "A".

NO.	DATE	REVISION	BY
5	4-24-68	AS NOTED	G.D.C.
4	3-20-68	AS NOTED*	G.D.C.
3	10-11-68	F2 & F2R	T.M.C.
2	8-30-68	AS NOTED	T.M.C.
1	6-19-68	GENERAL	T.M.C.

REF. DRWG.

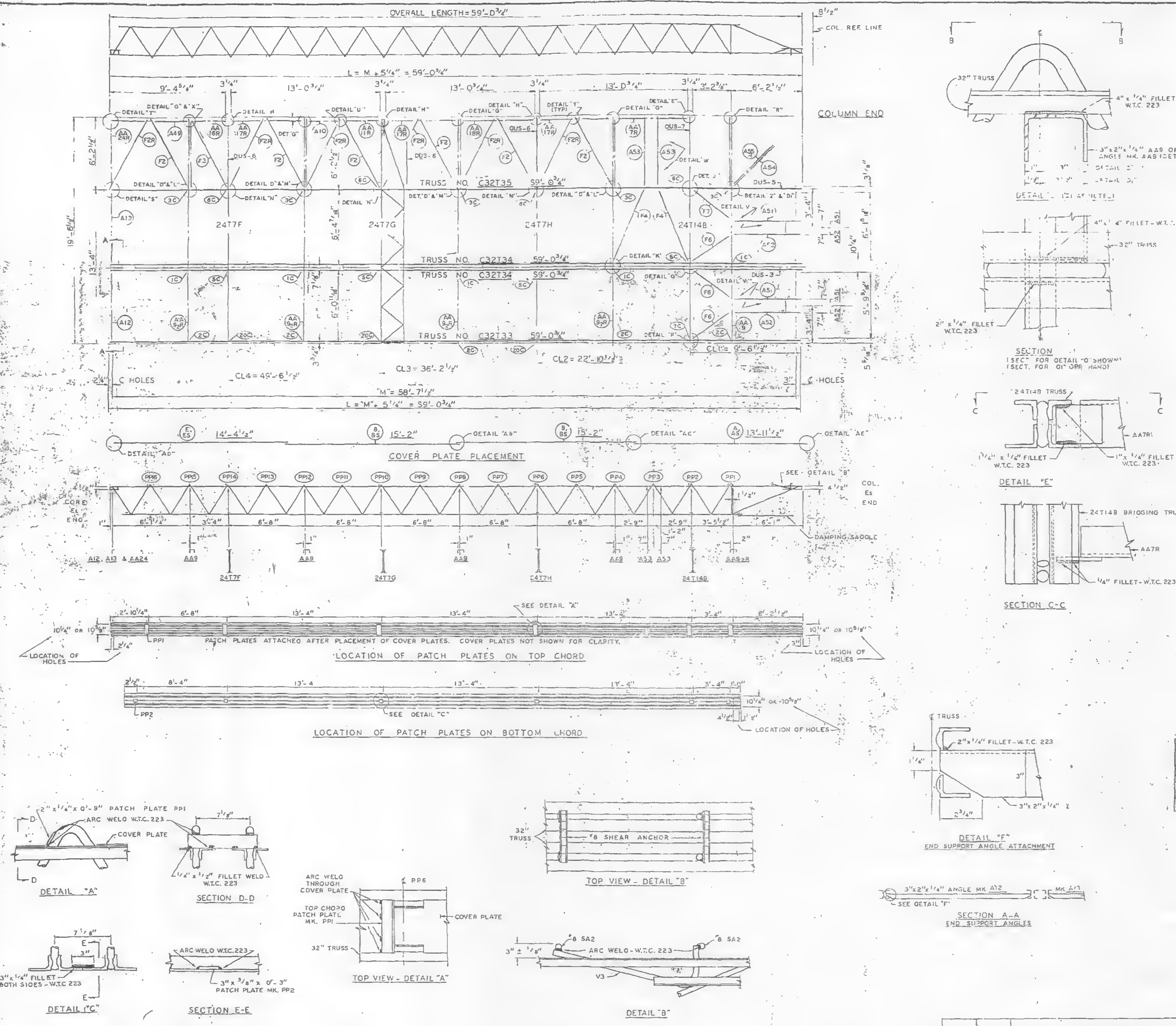
		SA-174	10-20-67
7-AB1-8	5-10-68	7-AB4-14,14.1	1-3-68
7-AB1-8	5-10-68	7-AB4-15,16	5-6-68
7-AB1-10	5-10-68	7-AB4-[illegible]	1-3-68
7-AB2-2	4-4-68	7-AB4-23,25	4-1-68
7-AB2-9	4-1-68	7-AB4-29,35.2	4-1-68
7-AB3-2	1-3-68	7-AB4-38-41,43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3,3.1,4	1-3-68	7-AB4-45,47,47.1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-105 (NORTH & SOUTH)
50-58, 79-91 (S) 46, 58, 84, 91 (N) PANEL 51 19'-6" x 58'-10"
5 BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-105 (E & W) 46-49 (W) 75-83 (E)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB4-13 5-3-68	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A. — DATE 5/15/69	DRAWN BY: [illegible] DATE JULY 5, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR — DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1


OVERALL LENGTH=59'-0 3/4"
COL. REF. LINE
L = M + 5 1/4" = 59'-0 3/4"
COLUMN END
TRUSS NO. C32T35 59'-0 3/4"
TRUSS NO. C32T34 59'-0 3/4"
TRUSS NO. C32T33 59'-0 3/4"
24T7F
24T7G
24T7H
24T14B
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
"M" = 58'-7 1/2"
L = "M" + 5 1/4" = 59'-0 3/4"
C HOLES
COVER PLATE PLACEMENT
CORE END
COL. END
DAMPING SADDLE
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
DETAIL "D"
SECTION
(SECT. FOR DETAIL "0" SHOWN)
(SECT. FOR 01" OPP. HAND)
DETAIL "E"
SECTION C-C
24T14B BRIDGING TRUSS
DETAIL "F"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLES
DETAIL "A"
SECTION D-D
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR
TOP VIEW - DETAIL "A"
DETAIL "B"
ARC WELD W.T.C. 223
DETAIL "C"
SECTION E-E
3"x 3/8" x 0'-3" PATCH PLATE MK. PP2
3"x 1/4" FILLET BOTH SIDES - W.T.C 223

25

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T33	1	C32T33 x 59'-0 3/4"	ST 233
	T34	2	C32T34 x 59'-0 3/4"	ST 234
	T35	1	C32T35 x 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F x 19'-6"	BT 207F
	T7G	1	24T7G x 19'-6"	BT 207G
	T7H	1	24T7H x 19'-6"	BT 207H
	T14B	1	24T14B x 19'-6"	BT 214B
3"x2"x1/4" ANGLES	A10	1	3"x2"x1/4"x 2'-7 5/16"	ST 404
	A12	1	3"x2"x1/4"x 5'-11 11/16"	ST 404
	A13	1	3"x2"x1/4"x 6'-3 7/16"	ST 404
	A49	1	3"x2"x1/4"x 8'-0 11/16"	ST 413
	A51	2	3"x2"x1/4"x 6'-0"	ST 413
	A52	2	3"x2"x1/4"x 6'-0"	ST 413
	A53	2	3"x2"x1/4"x 5'-10"	ST 413
	A54	1	3"x2"x1/4"x 4'-0 1/2"	ST 413
	A55R	1	3"x2"x1/4"x 4'-3"	ST 413
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST 406
	AA9	1	SEE REF. DRWG.	ST 404
	AA9 2R	4	SEE REF. DRWG.	ST 406
	AA11R	1	SEE REF. DRWG.	ST 406
	AA16R	1	SEE REF. DRWG.	ST 406
	AA17R	3	SEE REF. DRWG.	ST 406
	AA18R	1	SEE REF. DRWG.	ST 406
	AA24R	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	6	1 1/2"x 5/8"x 6'-10 1/2"	ST 402
	F2R	6	1 1/2"x 5/8"x 6'-10 1/2"	ST 402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST 402
	F4	2	1 1/2"x 5/8"x 7'-0"	ST 402
	F6	3	1 1/2"x 5/8"x 4'-7"	ST 415
	F7	1	1 1/2"x 5/8"x 4'-9 3/4"	ST 415
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST 400
	PP2	6	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	A	1	9"x .0135"x 13'-11 1/2"	ST 303
	B	2	9"x .0135"x 15'-2"	ST 303
	E	1	9"x .0135"x 14'-4 1/2"	ST 303
	As	1	3 1/2"x .0135"x 13'-11 1/2"	ST 303
	Bs	2	3 1/2"x .0135"x 15'-2"	ST 303
	Es	1	3 1/2"x .0135"x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	9	2"x 1 1/2"x 1/4"x 0'-6"	ST 400
	C2	7	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST 400
	C5	1	3"x 2"x .37"x 0'-3"	ST 416
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST 298
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST 299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST 299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST 299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST 400
	PF-3	5	3 1/2"x 3/8"x 0'-5"	ST 400
	PF-12	2	6 1/2"x 1/2"x 1'-0"	ST 416
	PF-13	2	1"x 1/4"x 1'-6"	ST 416
	PF-14	2	3"x 1/4"x 0'-7"	ST 416
	PF-15	2	1 1/2"x 1/2"x 0'-2"	ST 416
	PF-16	2	8 1/4"x 1/2"x 0'-2"	ST 416
	PF-17	2	2"x 1/4"x 3 1/2"	ST 416
	PF-18	3	2"x 1/4"x 1'-1 3/8"	ST 416
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST 400

LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CO 201, CO 204 & CO 229, Ie. ⓘⓒ

SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 7/3/69 By TCUP

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-F8-2 OR FP-F8-3 FOR DETAILS CALLED BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FILLET.
STEEL DECK NOT SHOWN IN DETAILS FOR CLARITY.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH)
PANEL FR8 19'-6" x 59'-0 3/4"

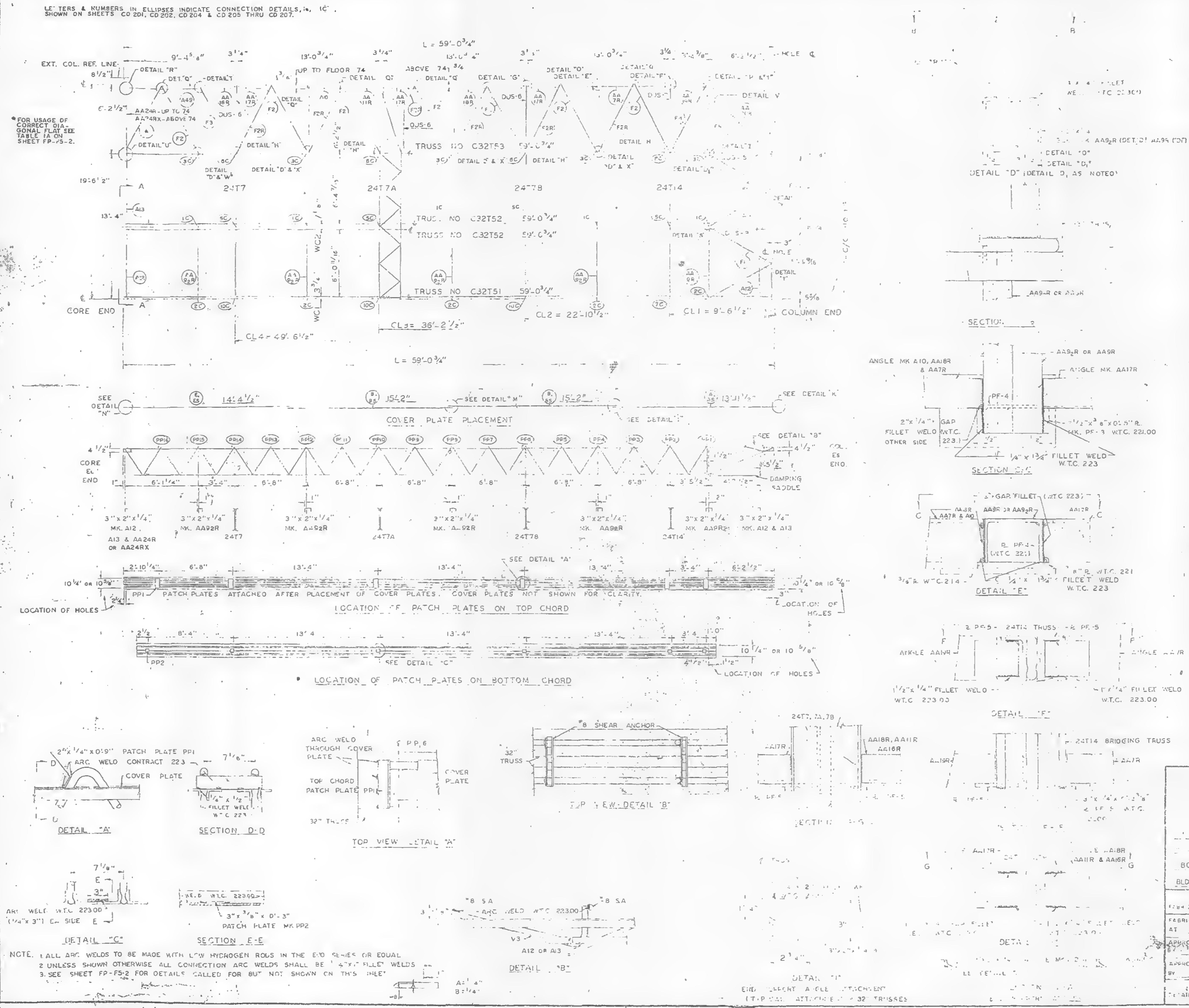
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-63	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY gdc DATE APR. 7, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APR. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY LA CARL WEBER		FABRICATION CONT. NO. W.T.C 221	SHEET NO. FP-FR8

LACLEDE STEEL CO

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (1C), SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.

* FOR USAGE OF CORRECT DIAGONAL FLAT SEE TABLE IA ON SHEET FP-F5-2.



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x [illegible] FILLET WELDS
3. SEE SHEET FP-F5-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

[illegible] MATERIAL	MK	[illegible]	SIZE	REF DWG
[illegible]	T51	1	C32T51 - 59'-0 3/4"	ST 251
	T52	[illegible]	C32T52 - 59'-0 3/4"	ST 252
	T53		C32T53 - 59'-0 3/4"	ST 253
BRIDGING TRUSSES	T7	1	24T7 [illegible]	ST 207
	[illegible]		24T7 [illegible]	[illegible]
	[illegible]		24T78 [illegible]	ST 2478
	T14		24T14 [illegible]	ST 214
[illegible] ANGLE	[illegible]		[illegible]	[illegible]
	A13		[illegible] x 1/4" x 6'-[illegible]	[illegible]
	[illegible]	2	[illegible]	[illegible]
	A49	1	3"x2"x1/4"x6'-0 11/16"	ST 413
ANGLE ASSEMBLY **(AA24R IS REPLACED BY AA24RX ABOVE FLOOR 74)	AA7R		SEE REF DRWG	[illegible]
	AA9R	1	SEE REF DRWG	ST 406
	AA9₂R	4	SEE REF DRWG	ST 406
	AA11R		SEE REF DRWG	ST 406
	AA18R		SEE REF DRWG	ST 406
	AA17R	3	SEE REF DRWG.	ST 406
	AA16R	1	SEE REF DRWG.	ST 400
	AA19R	1	SEE REF DRWG.	ST 400
	**AA24R	1	SEE REF. DRWG	ST 412
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST 402
	F2 F2R	7 6*	1 1/2"x5/8"x6'-10 1/2"	ST 402
	F3	1	1 1/2"x5/8"x6'-11 1/4"	ST 402
	F4	1	1 1/2"x5/8"x7'-0"	ST 402
	F5	[illegible]	1 1/2"x5/8"x4'-4"	ST 402
PATCH PLATES	PP1	6	2"x1/4"x0'-9"	ST 400
	PP2	5	3"x3/8"x0'-3"	ST 400
COVER PLATES	A	1	9"x.0135"x[illegible]'-11 1/2"	ST 303
	B	2	9"x.0135"x15'-2"	ST 303
	[illegible]	1	9"x.0135"x14'-4 1/2"	ST 303
	[illegible]	1	3 1/2"x.0135"x13'-11 1/2"	ST 303
	[illegible]	2	3 1/2"x.0135"x15'-2"	ST 303
	[illegible]	1	3 1/2"x.0135"x14'-4 1/2"	ST 303
ANGLE CLIPS	C2	4	2 1/2"x1 1/2"x1/4"x0'-6"	ST 400
	C1	12	2"x1 1/2"x1/4"x0'-6"	ST 400
DAMPING SADDLE	[illegible]		3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST 299
	PF-5	1	3 1/2"x3 1/2"x3/8"x[illegible]'-6 7/8"	ST 299
	PF-6	[illegible]	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST 299
	PF-7	1	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST 299
MISC. PLATES	PF-1	2	1 1/2"x1/2"x0'-4"	ST 400
	PF-3	5	3 1/2"x3/8"x0'-[illegible]	ST 400
FLAT ASSEMBLY	F8AR	*	SEE REF. DRWG.	ST 415
CONN. ANGLE	C5	1	3"x2"x.37"x0'-3"	ST 413
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST 400
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG	ST 405

NO	DATE	REVISION	BY

REF. DRWGS

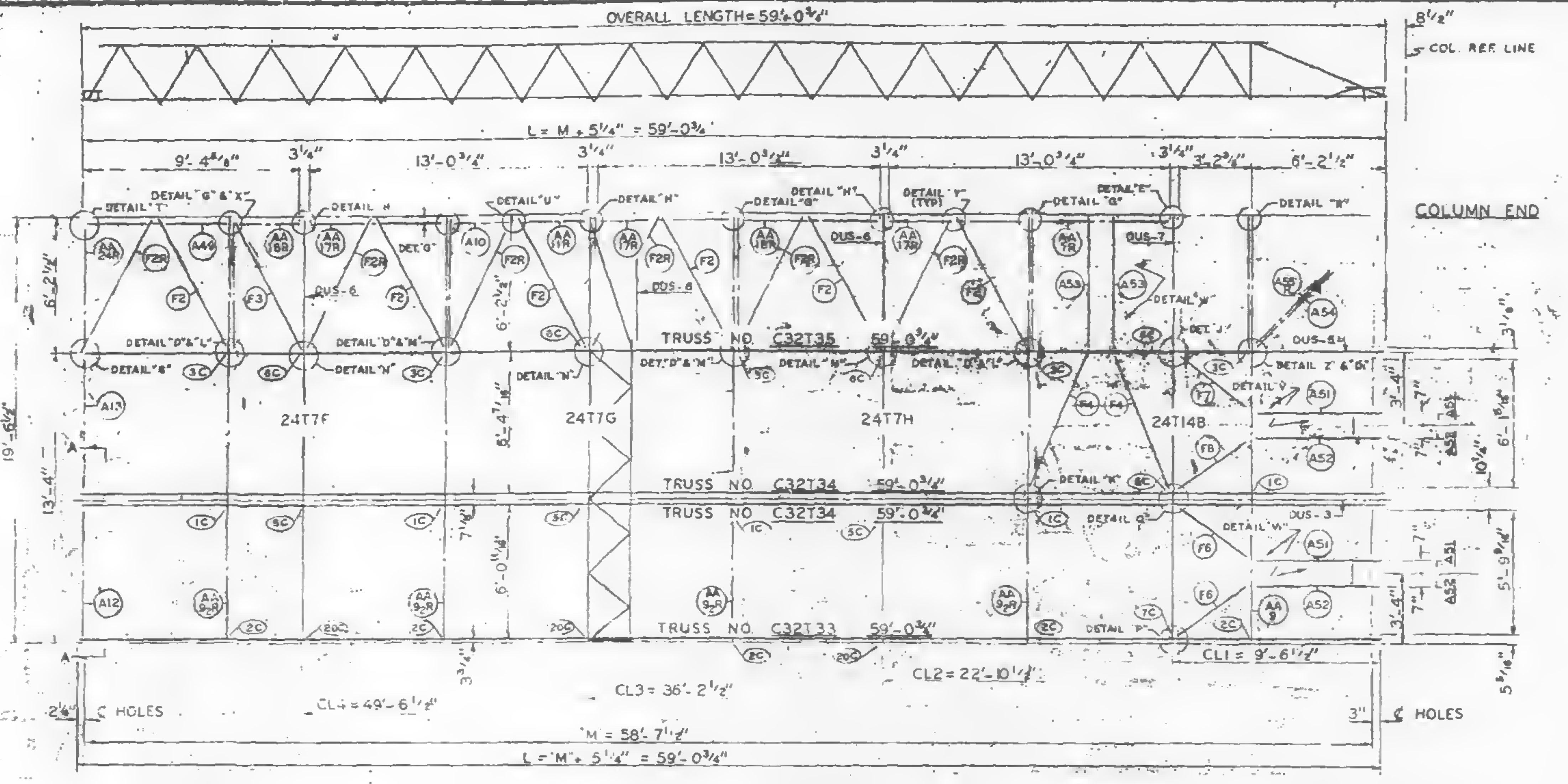
		SA-124	1-6-68
7-AB-46	11-25-68	7-AB4-14,14.1	10-15-68
7-AB-47	11-25-68	7-AB4-15,16	7-22-68
7-AB-48	11-25-68	7-AB4-21	7-22-68
7-AB[illegible]	7-22-68	7-AB4-23-25	7-22-68
7-AB[illegible]	7-22-68	7-AB4-29	1-3-68
7-AB[illegible]-70	11-25-68	7-AB4-39-41,43	7-22-68
7-AB3-76	11-25-68	7-AB4-4[illegible]	10-15-68
7-AB4-3	10-15-68	7-AB4-4[illegible]	12-20-68

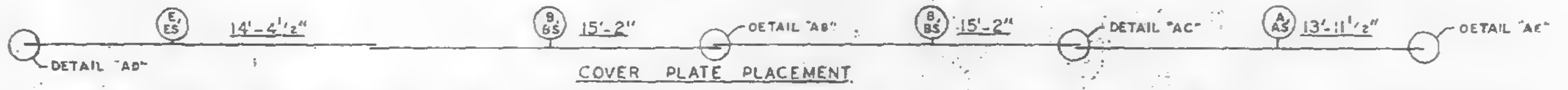
[illegible] STEEL [illegible]
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE [illegible] NEW YORK AUTHORITY

[illegible] 79 (NORTH & SOUTH) 45-49 (SOUTH ONLY)
80-83 (NORTH ONLY) FR5 [illegible]'-6" x 59'-0 3/4"
BLDG. B FLOORS 79 (EAST & WEST) 45-49 (EAST ONLY) 80-83 ([illegible] ONLY)

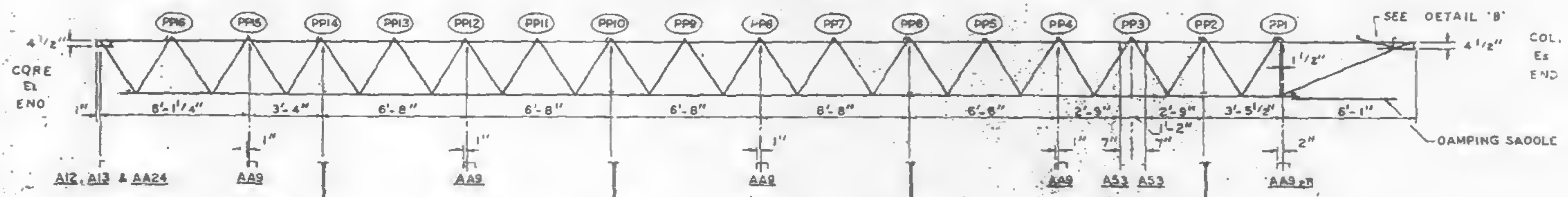
FABRICATION BY LACLEDE STEEL COMPANY

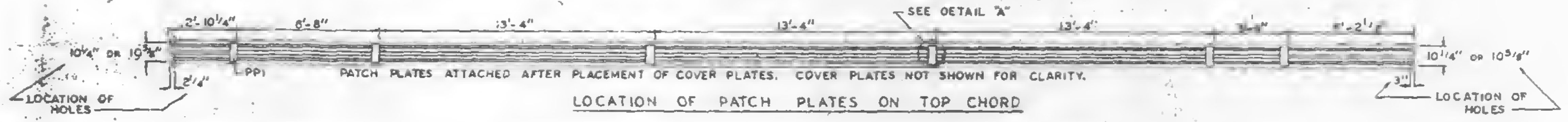
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-76	PLATE
APPROVED FOR FABRICATION FOR PONYA BY [illegible] DATE [illegible]	DRAWN BY [illegible] DATE APRIL 9, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE	CHECKED BY T.M. CHURA DATE APRIL 9, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER	FABRICATION CONT. NO. WTC 221	SHEET NO. FP-FR5


OVERALL LENGTH=59'-0 3/4"
COL. REF. LINE
L = M + 5 1/4" = 59'-0 3/4"
COLUMN END
TRUSS NO. C32T35 59'-0 3/4"
TRUSS NO. C32T34 59'-0 3/4"
TRUSS NO. C32T34 59'-0 3/4"
TRUSS NO. C32T33 59'-0 3/4"
24T7F
24T7G
24T7H
24T14B
CL1 = 9'-6 1/2"
CL2 = 22'-10 1/2"
CL3 = 36'-2 1/2"
CL4 = 49'-6 1/2"
℄ HOLES
M = 58'-7 1/2"
L = M + 5 1/4" = 59'-0 3/4"

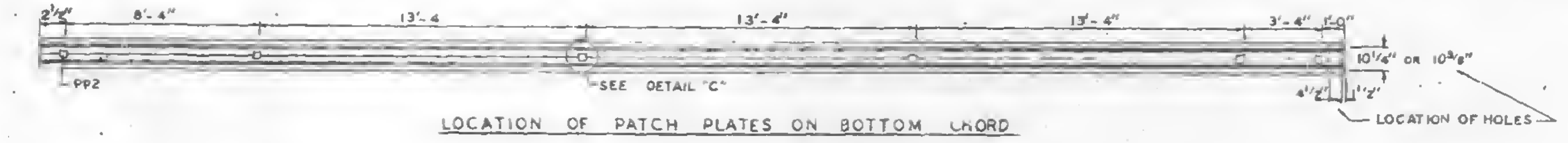


COVER PLATE PLACEMENT

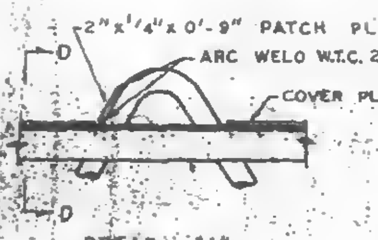



SEE DETAIL "A"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
PP1

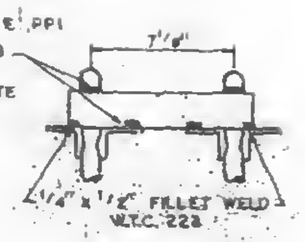
LOCATION OF PATCH PLATES ON TOP CHORD



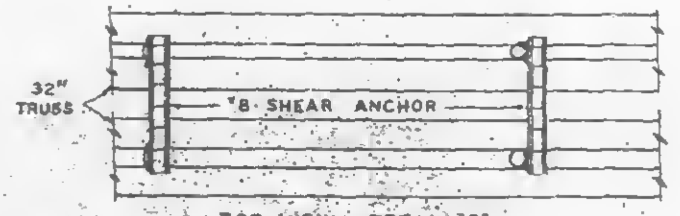
LOCATION OF PATCH PLATES ON BOTTOM CHORD



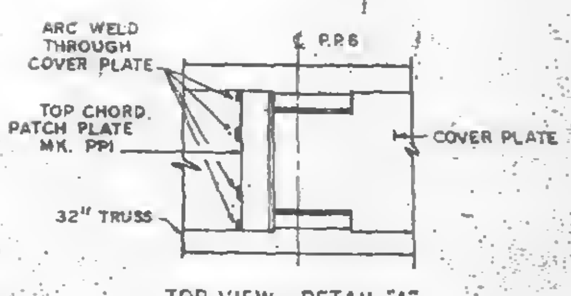
DETAIL "A"



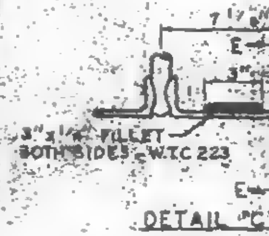
SECTION D-D



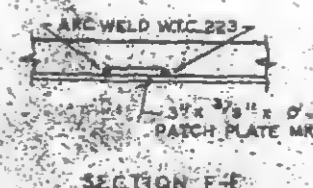
TOP VIEW - DETAIL "B"



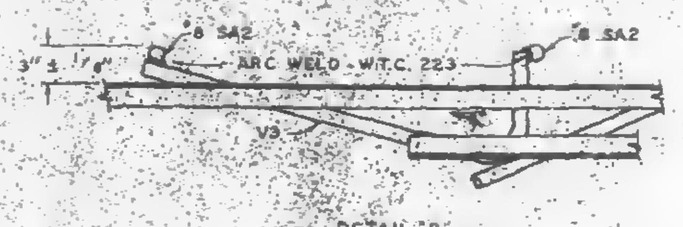
TOP VIEW - DETAIL "A"



DETAIL "C"

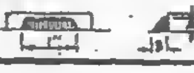


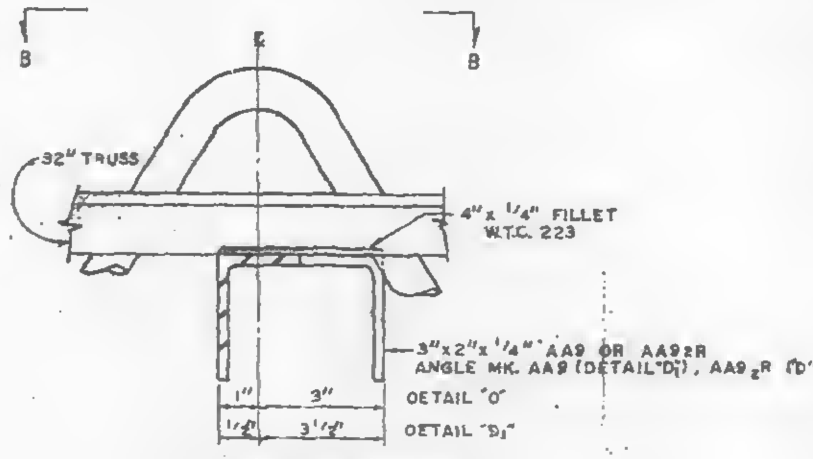
SECTION E-E



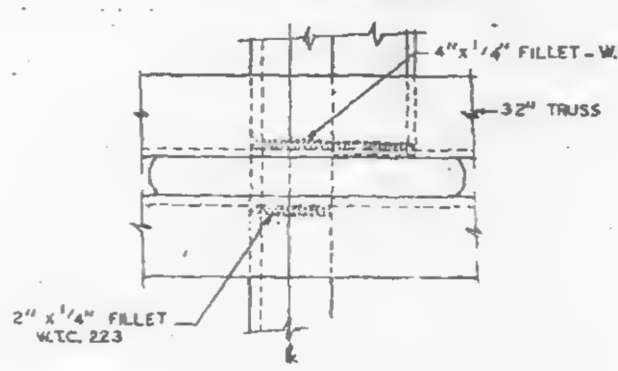
DETAIL "B"

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-FB OR FP-FB-3 FOR DETAILS CALLED BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FILLET.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

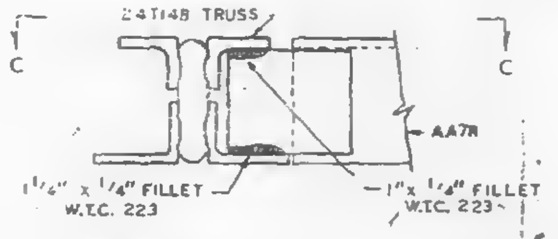



B
B
32" TRUSS
4"x1/4" FILLET W.T.C. 223
3"x2"x1/4" AA9 OR AA92R ANGLE MK. AA9 (DETAIL "D1"), AA92R ("D")
DETAIL "D"
DETAIL "D1"

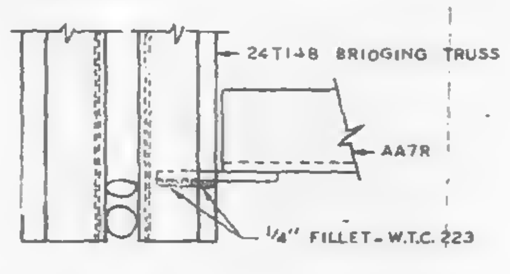
DETAIL "D" (D1 AS NOTED)



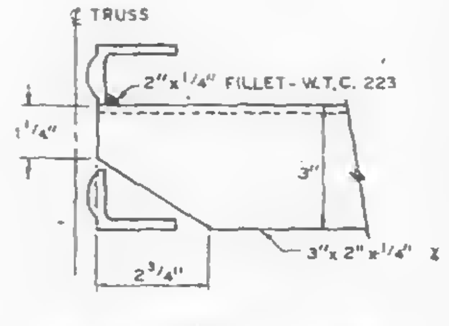
SECTION B-B
(SECT. FOR DETAIL "D" SHOWN)
(SECT. FOR "D1" OPP. HAND)



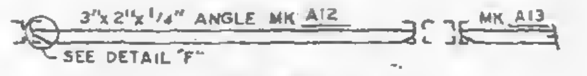
DETAIL "E"



SECTION C-C



DETAIL "F"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLES

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T33	1	C32T33 x 59'-0 3/4"	ST 233
	T34	2	C32T34 x 59'-0 3/4"	ST 234
△1	T35	1	C32T35 x 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F x 19'-8"	BT 207F
	T7G	1	24T7G x 19'-8"	BT 207G
	T7H	1	24T7H x 19'-6"	BT 207H
	T14B	1	24T14B x 19'-8"	BT 214B
3"x2"x1/4" ANGLES	A10	1	3"x2"x1/4"x2'-7 7/16"	ST 404
	A12	1	3"x2"x1/4"x5'-11 11/16"	ST 404
	A13	1	3"x2"x1/4"x6'-3 7/16"	ST 404
	A49	1	3"x2"x1/4"x6'-0 11/16"	ST 413
	A51	2	3"x2"x1/4"x6'-0"	ST 413
	A52	2	3"x2"x1/4"x6'-0"	ST 413
	A53	2	3"x2"x1/4"x5'-10"	ST 413
	A54	1	3"x2"x1/4"x4'-0 1/2"	ST 413
	A55R	1	3"x2"x1/4"x4'-3"	ST 413
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG	ST 406
	AA9	1	SEE REF. DRWG.	ST 404
	AA92R	4	SEE REF. DRWG.	ST 406
	AA11R	1	SEE REF. DRWG.	ST 406
	AA16R	1	SEE REF. DRWG.	ST 406
	AA17R	3	SEE REF. DRWG.	ST 406
	AA18R	1	SEE REF. DRWG.	ST 406
	AA24R	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	6	1 1/2"x5/8"x6'-10 1/2"	ST 402
	F2R	6	1 1/2"x5/8"x6'-10 1/2"	ST 402
	F3	1	1 1/2"x5/8"x6'-11 1/4"	ST 402
	F4	2	1 1/2"x5/8"x7'-0"	ST 402
	F6	3	1 1/2"x5/8"x4'-7"	ST 415
	F7	1	1 1/2"x5/8"x4'-9 3/4"	ST 415
PATCH PLATES	PP1	6	2"x1/4"x0'-9"	ST 400
	PP2	6	3"x3/8"x0'-3"	ST 400
COVER PLATES	A	1	9"x.0135"x13'-11 1/2"	ST 303
	B	2	9"x.0135"x15'-2"	ST 303
	E	1	9"x.0135"x14'-4 1/2"	ST 303
	As	1	3 1/2"x.0135"x13'-11 1/2"	ST 303
	Bs	2	3 1/2"x.0135"x15'-2"	ST 303
	Es	1	3 1/2"x.0135"x14'-4 1/2"	ST 303
ANGLE CLIPS	C1	9	2"x1 1/2"x1/4"x0'-6"	ST 400
	C2	7	2 1/2"x1 1/2"x1/4"x0'-6"	ST 400
	C5	1	3"x2"x.37"x0'-3"	ST 416
DAMPING SADDLE	DUS-3	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST 298
	DUS-5	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST 299
	DUS-6	3	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST 1299
	DUS-7	1	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST 299
MISC. PLATES	PF-1	2	1 1/2"x1/2"x0'-4"	ST 400
	PF-3	5	3 1/2"x3/8"x0'-5"	ST 400
	PF-12	2	6 1/2"x1/2"x1'-0"	ST 416
	PF-13	2	1"x1/4"x1'-0"	ST 416
	PF-14	2	3"x1/4"x0'-7"	ST 418
	PF-15	2	1 1/2"x1/2"x0'-2"	ST 416
	PF-16	2	8 1/4"x1/2"x0'-2"	ST 418
	PF-17	2	2"x1/4"x3 1/2"	ST 416
	PF-18	3	2"x1/4"x1'-1 3/8"	ST 416
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST 400

LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 229, ie (1C)

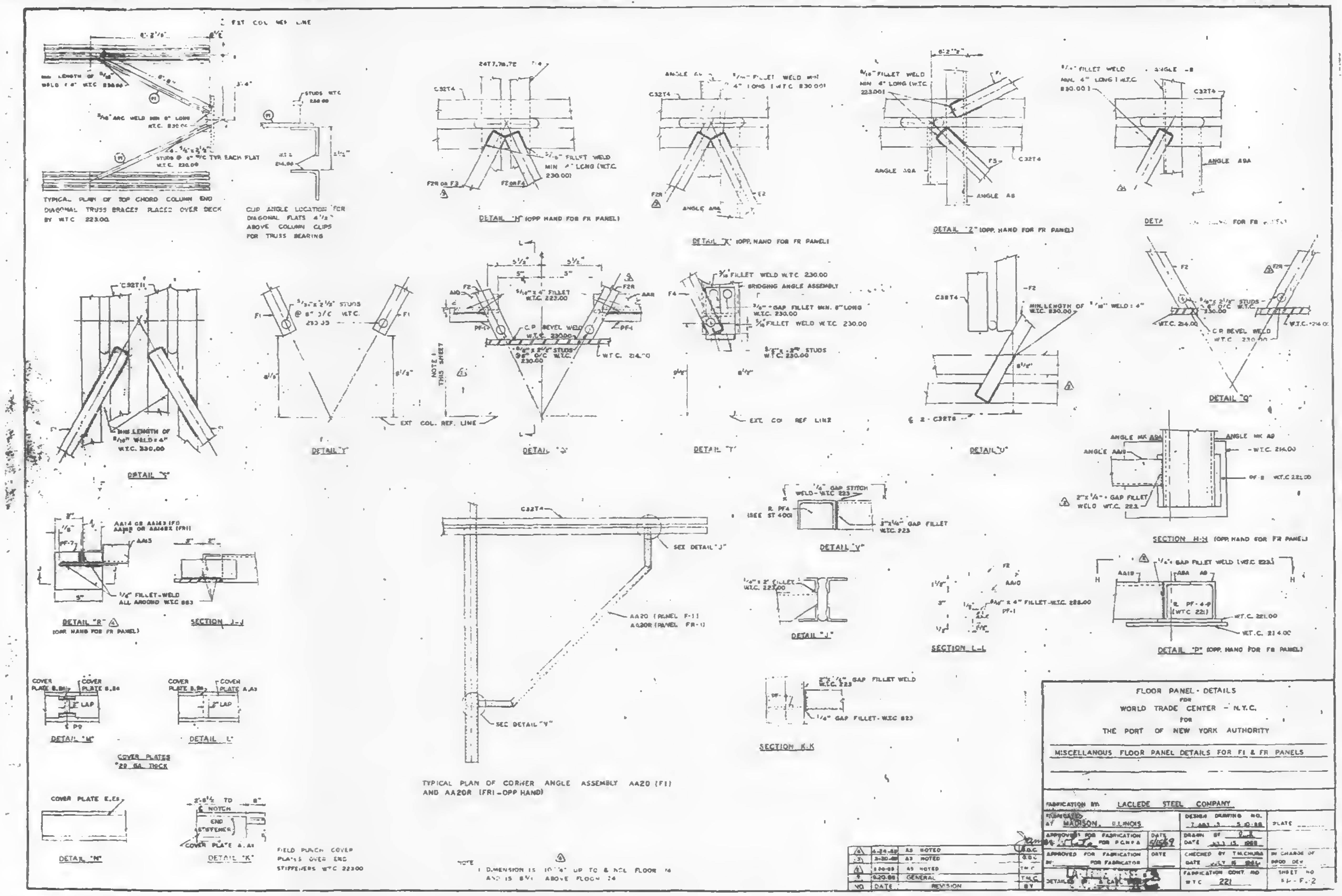
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (SOUTH)
PANEL FR8 19'-6" x 59'-0 3/4"

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-63	PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 8/11/69	DRAWN BY: gdc DATE APR. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE APR. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [redacted]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR8

NO.	DATE	REVISION	BY
△1	8-4-69	AS NOTED	G.W.C.


EXT. COL. REF. LINE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
DETAIL "H" (OPP. HAND FOR FR PANEL)
DETAIL "X" (OPP. HAND FOR FR PANEL)
DETAIL "Z" (OPP. HAND FOR FR PANEL)
DETAIL "Q"
DETAIL "S"
DETAIL "T"
DETAIL "U"
DETAIL "V"
DETAIL "J"
DETAIL "R" (OPP. HAND FOR FR PANEL)
SECTION J-J
SECTION H-H (OPP. HAND FOR FR PANEL)
SECTION L-L
SECTION K-K
DETAIL "P" (OPP. HAND FOR FR PANEL)
DETAIL "M"
DETAIL "L"
DETAIL "N"
DETAIL "K"
COVER PLATES "20 GA. THICK"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR1 - OPP HAND)
SEE DETAIL "J"
SEE DETAIL "V"
AA20 (PANEL F-1)
AA20R (PANEL FR-1)
NOTE
1. DIMENSION IS 10 1/2" UP TO & INCL FLOOR 74 AND IS 8 3/4" ABOVE FLOOR 74

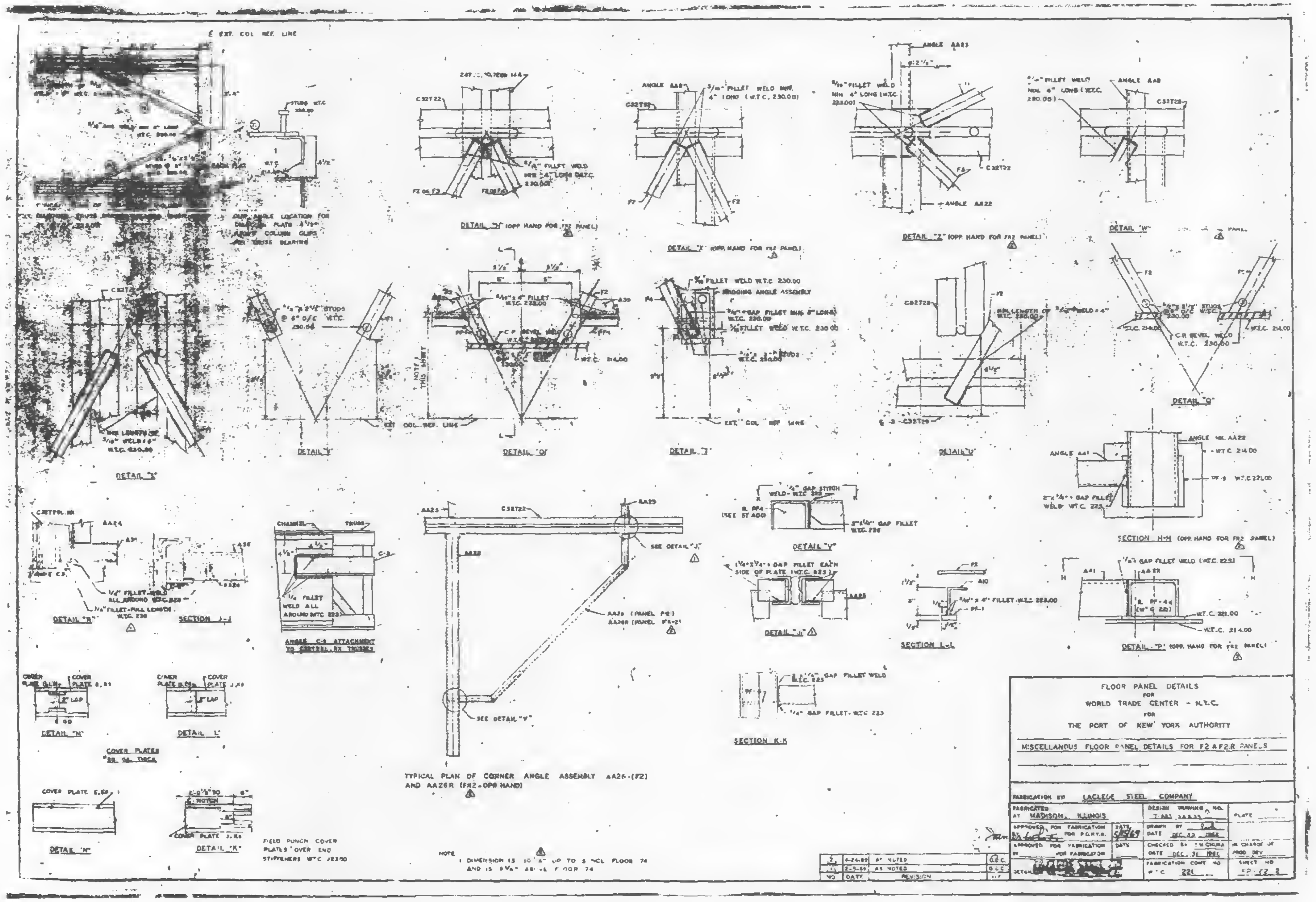
FLOOR PANEL - DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 5/16/69	DESIGN DRAWING NO. [illegible]	PLATE
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	DRAWN BY [illegible] DATE JULY 15 1968	
DETAILED BY [illegible]		CHECKED BY T.M.CHURA DATE JULY 16 1968	IN CHARGE OF PROD. DEV.
		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FL - F.2

NO.	DATE	REVISION	BY
4	4-24-69	AS NOTED	D.O.C.
3	3-30-69	AS NOTED	D.O.C.
2	[illegible]	AS NOTED	T.M.C.
1	9-20-68	GENERAL	T.M.C.



℄ EXT. COL. REF. LINE
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL PLATE 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
C32T22
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
F2 OR F3
DETAIL "H" (OPP. HAND FOR FR2 PANEL)
ANGLE AA9
C32T22
3/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
F2
DETAIL "X" (OPP. HAND FOR FR2 PANEL)
ANGLE AA23
5/16" FILLET WELD MIN 4" LONG (W.T.C. 223.00)
F3
C32T22
ANGLE AA22
DETAIL "Z" (OPP. HAND FOR FR2 PANEL)
3/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
ANGLE AA8
C32T22
DETAIL "W"
C32T22
MIN. LENGTH OF 5/16" WELD = 6" W.T.C. 230.00
DETAIL "S"
1/2" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
DETAIL "Y"
5 1/2"
5"
5/16" x 4" FILLET W.T.C. 223.00
C.P. BEVEL WELD
W.T.C. 214.00
NOTE 1 THIS SHEET
EXT. COL. REF. LINE
DETAIL "O"
5/16" FILLET WELD W.T.C. 230.00
BRIDGING ANGLE ASSEMBLY
3/16" GAP FILLET MIN. 3" LONG W.T.C. 230.00
5/16" FILLET WELD W.T.C. 230.00
EXT. COL. REF. LINE
DETAIL "T"
C32T22
F2
MIN. LENGTH OF 3/16" WELD = 4" W.T.C. 230.00
℄ 2 - C32T22
DETAIL "U"
F2
1/2" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
W.T.C. 214.00
C.P. BEVEL WELD W.T.C. 230.00
DETAIL "Q"
ANGLE MK. AA22
W.T.C. 214.00
ANGLE A41
PF-9 W.T.C. 221.00
2" x 1/4" GAP FILLET WELD W.T.C. 223
SECTION H-H (OPP. HAND FOR FR2 PANEL)
C32T22
AA24
A31
1/4" FILLET WELD ALL AROUND W.T.C. 223
1/4" FILLET-FULL LENGTH W.T.C. 230
DETAIL "R"
SECTION J-J
CHANNEL
TRUSS
4 1/2"
C-9
1/4 FILLET WELD ALL AROUND W.T.C. 223
ANGLE C-9 ATTACHMENT TO C32T22 BX TRUSSES
AA23
C32T22
AA22
SEE DETAIL "J"
AA26 (PANEL F2)
AA26R (PANEL FR-2)
SEE DETAIL "V"
1/4" GAP STITCH WELD - W.T.C. 223
PL. PF4 (SEE ST A00)
3" x 1/4" GAP FILLET W.T.C. 226
DETAIL "V"
1/4" x 3/4" GAP FILLET EACH SIDE OF PLATE (W.T.C. 223)
AA23
DETAIL "J"
F2
A10
5/16" x 4" FILLET W.T.C. 228.00
PF-1
SECTION L-L
1/4" GAP FILLET WELD (W.T.C. 223)
A41
AA22
PL. PF-4 (W.T.C. 221)
W.T.C. 221.00
W.T.C. 214.00
DETAIL "P" (OPP. HAND FOR FR2 PANEL)
1/4" GAP FILLET WELD W.T.C. 223
1/4" GAP FILLET W.T.C. 223
SECTION K-K
COVER PLATE
COVER PLATE
2" LAP
DETAIL "N"
DETAIL "L"
COVER PLATES 20 GA. THICK
COVER PLATE
DETAIL "M"
2'-0 1/2" TO 6"
NOTCH
COVER PLATE
DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA26-(F2) AND AA26R (FR2-OPP. HAND)

NOTE
1 DIMENSION IS 10 "A" UP TO & INCL. FLOOR 74 AND IS 9 1/8" ABOVE FLOOR 74

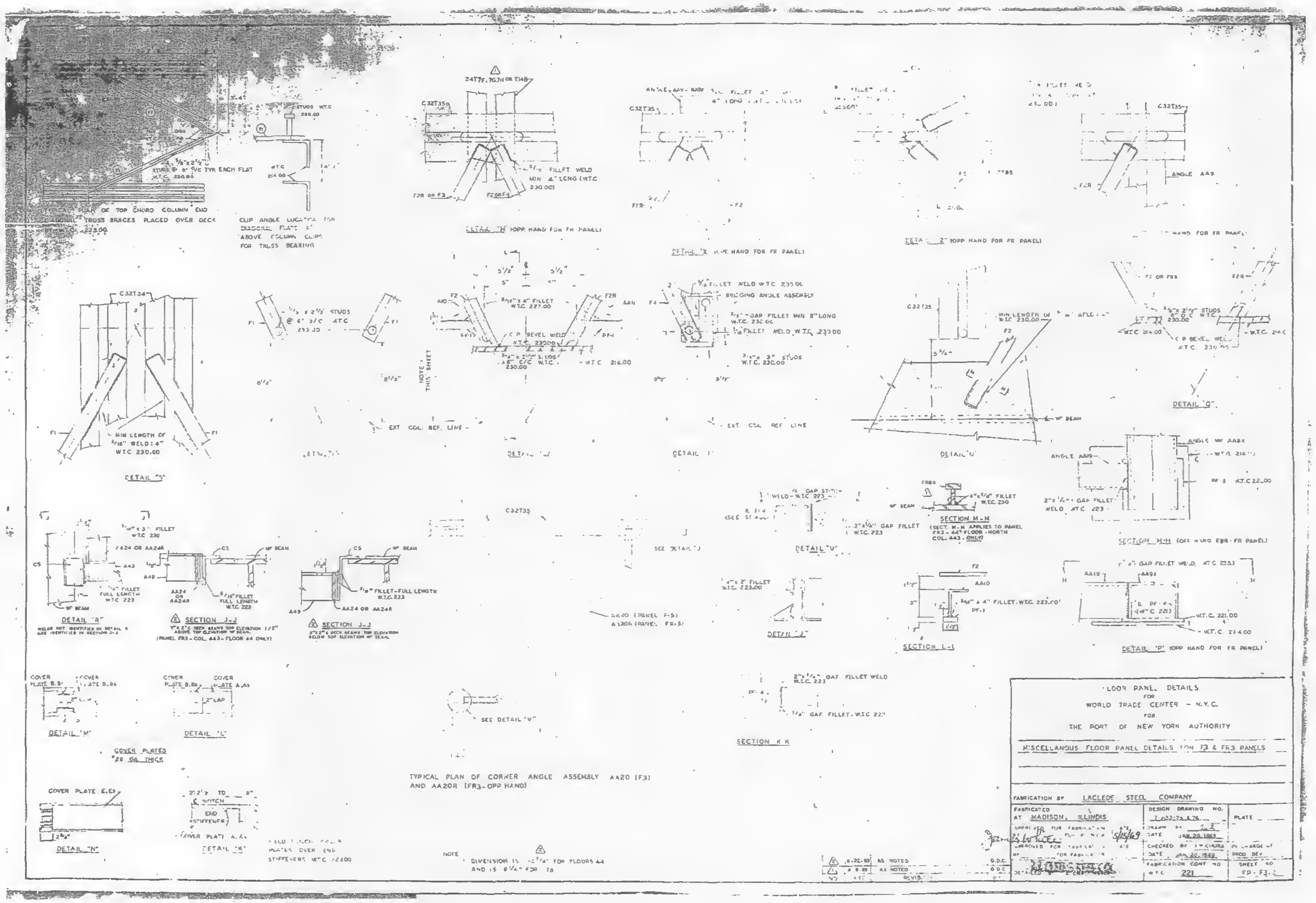
NO	DATE	REVISION	BY
2	4-24-69	AS NOTED	G.C.C.
1	2-5-69	AS NOTED	G.C.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F2 & F2.R PANELS

FABRICATION BY LACLEDE STEEL COMPANY

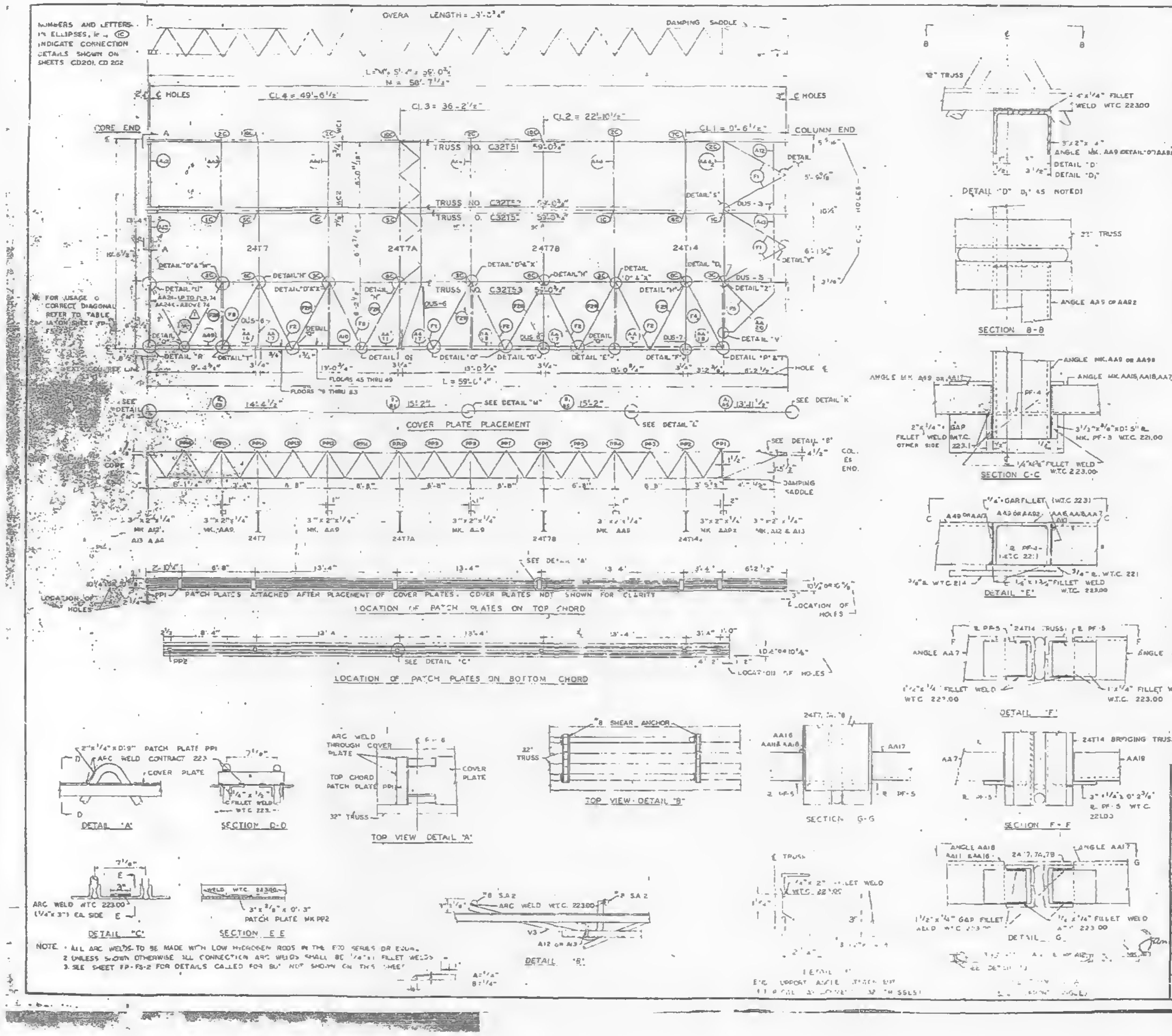
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83 SA-A35	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 5/19/69	DRAWN BY DATE DEC. 30 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE DEC. 31 1968	IN CHARGE OF PROD. DEV.
DETAILER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. SP-F2 2


PLAN OF TOP CHORD COLUMN END
DIAGONAL TRUSS BRACES PLACED OVER DECK
CLIP ANGLE LOCATED FOR DIAGONAL PLATE ABOVE COLUMN CLIPS FOR TRUSS BEARING
C32T35
DETAIL "H" (OPP HAND FOR FR PANEL)
DETAIL "X" (OPP HAND FOR FR PANEL)
DETAIL "Z" (OPP HAND FOR FR PANEL)
C32T34
MIN LENGTH OF 5/16" WELD: 4" W.T.C. 230.00
DETAIL "S"
EXT. COL. REF. LINE
C.P. BEVEL WELD
W.T.C. 216.00
BRIDGING ANGLE ASSEMBLY
DETAIL "U"
DETAIL "Q"
W BEAM
ANGLE AA19
SECTION M-M (OPP HAND FOR FR PANEL)
SECTION M-N
(SECT. M-N APPLIES TO PANEL FR3 - 44th FLOOR - NORTH COL. 443 - ONLY)
DETAIL "V"
SEE DETAIL "J"
AA20 (PANEL F-5)
AA20R (PANEL FR-5)
DETAIL "J"
SECTION L-L
DETAIL "P" (OPP HAND FOR FR PANEL)
SECTION K-K
DETAIL "R"
WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J
AA24 OR AA24R
SECTION J-J
(PANEL FR3 - COL. 443 - FLOOR 44 ONLY)
5/16" FILLET - FULL LENGTH W.T.C. 223
COVER PLATE B.B1
COVER PLATE A.A1
2" LAP
DETAIL "M"
DETAIL "L"
COVER PLATES #28 GA. THICK
COVER PLATE E.E1
END STIFFENER
DETAIL "N"
DETAIL "K"
SEE DETAIL "V"
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F3) AND AA20R (FR3 - OPP HAND)
NOTE
DIMENSION IS FOR FLOORS 44 AND IS 9 1/4" FOR 78

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F3 & FR3 PANELS

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION 5/15/69
DESIGN DRAWING NO.
DRAWN BY
DATE JAN. 20, 1969
CHECKED BY
DATE JAN. 20, 1969
PLATE
IN CHARGE OF PROD. DEV.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FD-F3-


NUMBERS AND LETTERS IN ELLIPSES, ie., (IC) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202

NOTE: 1 ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2 UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1 FILLET WELDS
3. SEE SHEET FP-F5-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T51	1	C32T51 59'-0 3/4"	ST 251
	T52	2	C32T52 59'-0 3/4"	ST 252
	T53	1	C32T53 59'-0 3/4"	ST 253
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST 207
	T7A	1	24T7A - 19'-6"	ST 207A
	T7B	1	24T7B - 19'-6"	ST 207B
	T14	1	24T14 - 19'-6"	ST 214
3"x 2"x 1/4" ANGLES	[illegible]	1	[illegible]	ST 404
	[illegible]	2	[illegible]	ST 404
	[illegible]	2	[illegible]	ST 404
	AA4	1	[illegible]	ST 413
ANGLE ASSEMBLY **AA24 IS REPLACED BY AA24F ABOVE FLR. 74 ⚠	AA7	[illegible]	SEE REF DRWG	ST 404
	AA9	4	SEE REF DRWG	ST 404
		[illegible]	SEE REF DRWG	ST 404
		[illegible]	SEE REF DRWG	ST 404
			DRWG	ST 404
			DRWG	ST 404
				ST 404
	[illegible]	1	SEE REF DRWG	ST 404
	**AA24	1	SEE REF DRWG	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-6"	ST 402
	F2 F2S	6 * 2	1 1/2" x 5/8" x 6'-10 1/2"	ST 402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST 402
	F4	1	1 1/2" x 5/8" x 7'-0	ST 402
	F5	1	1 1/2" x 5/8" x 4'-4"	ST 402
PATCH PLATES	PP1	6	2" x 1/4" x 1'-9"	ST 400
	PP2	5	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x 0.35" x 13'-11 1/2	ST 303
	B	2	9" x 0.35" x 15'-2"	ST 303
	E	1	9" x 0.35" x 14'-4 1/2"	ST 303
	AS	1	3 1/2" x 0.35" x 13'-11 1/2"	ST 303
	BS	2	3 1/2" x 0.35" x 15'-2	ST 303
	ES	1	3 1/2" x 0.25" x 14'-4 1/2	ST 303
DIAGONAL FLAT	F6A	*	SEE REF DRWG	ST 415
# 8 SHEAR ANCHOR	SA2	2	# 8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/8"	ST 299
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-8 3/8"	ST 299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 3/8"	ST 299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 3/8"	ST 299
MISC PLATES	PF-1	12	1 1/2" x 1/2" x 0'-4"	ST 400
	PF-3	5	3" x 3/8" x 0'-3"	ST 400
CONN ANGLE	C5	1	3 x 2" x 3/8" x 0-3	ST 413
ANGLE CLIP ⚠	C1	12	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	4	2 1/4" x 1 1/2" x 1/4" x 0'-6"	ST 400
CORNER ANGLE ASSEMBLY	AA10	[illegible]	SEE REF DRWG	ST 405

NO	DATE	REVISION	BY
2	4-24-69	AS NOTED	[illegible]
⚠	4-8-69	AS NOTED	G.D.C.

REF. DRWG

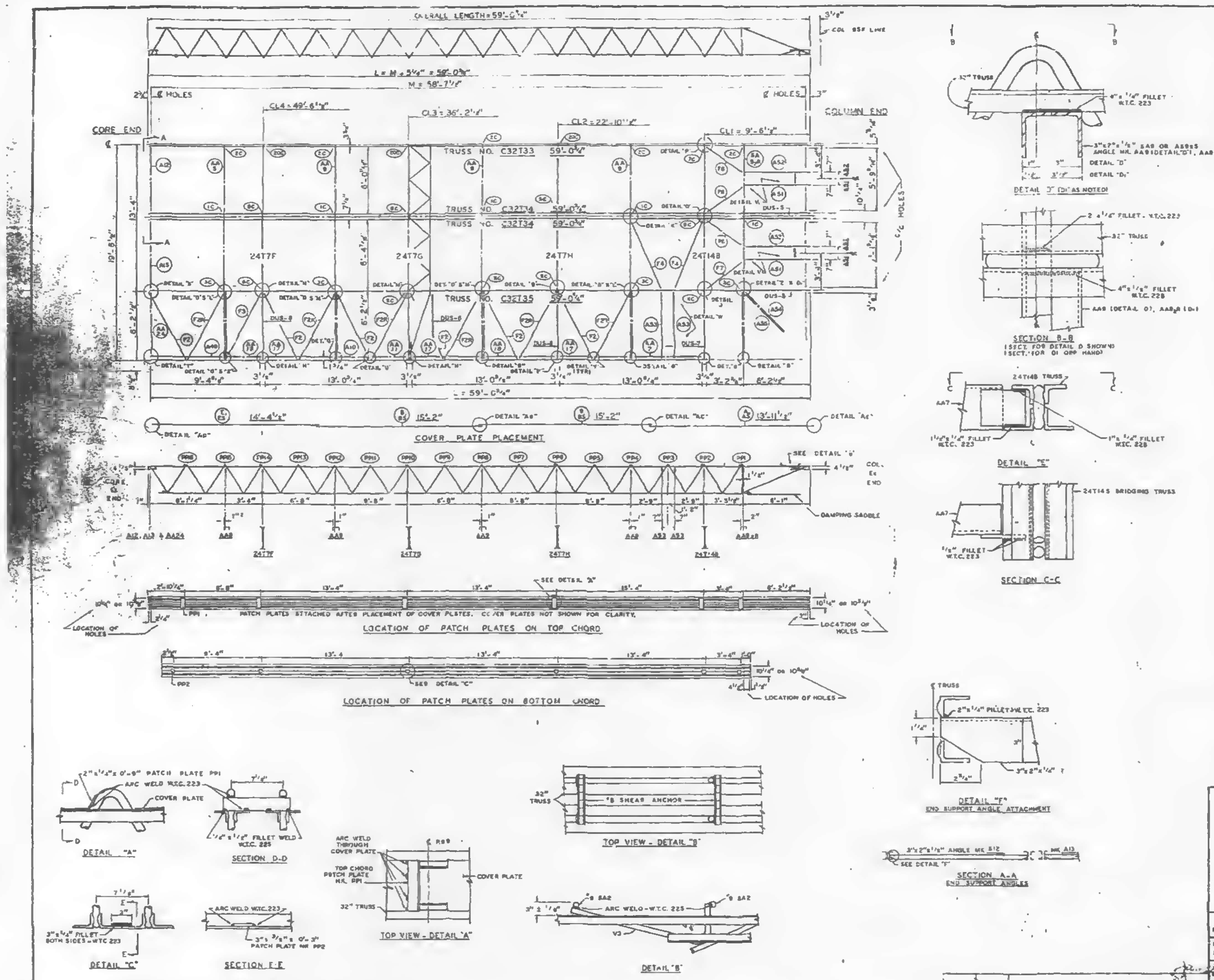
7-AB1-46	11-25-68	SA-124	1-8-69
7-AB1-47	11-25-68	7-AB4-14,14.1	10-15-68
7-AB1-48	11-25-68	7-AB4-15,16	7-22-68
7-AB2-2	7-22-68	7-AB4-21	7-22-68
7-AB2-9	7-22-68	7-AB4-23,25	7-22-68
7-AB3-70	11-25-68	7-AB4-29	1-3-69
7-AB3-75	11-25-68	7-AB4-39-41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB4-45	12-20-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46-49 (SOUTH) 79-83 (NORTH)
PANEL #5 19'-5 x 59'-0 3/4"
BLDG B FLOORS 45 (EAST & WEST) 46-49 (EAST) 79-83 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB1-15	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 5/15/69	DRAWN BY [illegible] DATE JAN 17, 1969	
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR	DATE	CHECKED BY T.H. CHURS DATE JAN 17, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. WTC 221	SHEET NO FP-F5



ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-F8-2 OR FP-F8-3 FOR DETAILS CALLED OUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/2" FILLET.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T33	1	C32T33 x 59'-0 3/16"	ST 233
	T34	2	C32T34 x 59'-0 3/16"	ST 234
	T35	1	C32T35 x 59'-0 3/16"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F x 19'-8"	ST 207F
	T7G	1	24T7G x 19'-8"	ST 207G
	T7H	1	24T7H x 19'-8"	ST 207H
	T14B	1	24T14B x 19'-8"	ST 214B
" x 1/4" ANGLES	A10	1	3" x 2" x 1/4" x 2'-7 [illegible]"	ST 404
	A12	1	3" x 2" x 1/4" x 5'-11 [illegible]"	ST 404
	A13	1	3" x 2" x 1/4" x 6'-5 7/8"	ST 404
	A49	1	3" x 2" x 1/4" x 6'-0 [illegible]"	ST 413
	A51	2	3" x 2" x 1/4" x 6'-0"	ST 413
	A52	2	3" x 2" x 1/4" x 6'-6"	ST 413
	A53	2	3" x 2" x 1/4" x 5'-10"	ST 413
	[illegible]		" x 2" x 1/4" x 4'-0 1/2"	ST 413
	[illegible]		" x 2" x 1/4" x 4'-3"	ST 413
ANGLE ASSEMBLY	[illegible]		[illegible] DRWG.	ST 404
	[illegible]	4	SEE REF. DRWG.	ST 404
	AA5R	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA14	1	SEE REF. DRWG.	ST 234
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	5	1 1/2" x 5/8" x 8'-10 1/2"	ST 402
	F2B	4	1 1/2" x 5/8" x 8'-10 1/4"	ST 402
	F3	1	1 1/2" x 5/8" x 8'-11 1/4"	ST 402
	F4	2	1 1/2" x 5/8" x 7'-0"	ST 402
	F6	5	1 1/2" x 5/8" x 4'-7"	ST 415
	F7	1	1 1/2" x 5/8" x 4'-8 3/16"	ST 415
PATCH PLATES	PP1	9	2" x 1/4" x 0'-9"	ST 400
	PP2	9	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST 303
	B	2	9" x .0135" x 15'-2"	ST 303
	E	1	9" x .0135" x 14'-4 1/2"	ST 303
	As	1	3 1/2" x .0135" x 13'-11 1/2"	ST 303
	Bs	2	3 1/2" x .0135" x 15'-2"	ST 303
	Es	1	3 1/2" x .0135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	12	2" x 1 1/2" x 1/4" x 0'-4"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C8	1	3" x 2" x .37" x 0'-8"	ST 418
DAMPING SADDLE	DUS-2	1	3 1/2" x 3 1/2" x [illegible] x 3'-8 [illegible]"	ST 298
	DUS-3	1	5 1/2" x 3 1/2" x 1/4" x 3'-8 [illegible]"	ST 295
	DUS-6	3	3 1/2" x [illegible] x 4'-4 [illegible]"	ST 299
	DUS-7	1	3 1/2" x [illegible] x 4'-4 [illegible]"	ST 299
MISC. PLATES	PF-1	2	1 1/2" x 1/2" x 0'-4"	ST 400
	PF-3	8	3 1/2" x 3/8" x 0'-5"	ST 400
	PF-12	2	9 1/2" x 1/2" x 1'-0"	ST 419
	PF-13	2	1" x 1/4" x 1'-0"	ST 416
	PF-14	2	5" x 1/4" x 0'-7"	ST 419
	PF-15	2	1 1/2" x 1/2" x 0'-2"	ST 410
	PF-8	2	8 1/4" x 1/2" x 0'-2"	ST 419
	PF-17	2	2" x 1/4" x 3 1/2"	ST 418
	PF-10	3	2" x 1/2" x 1'-1 3/8"	ST 415
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-6"	ST 200

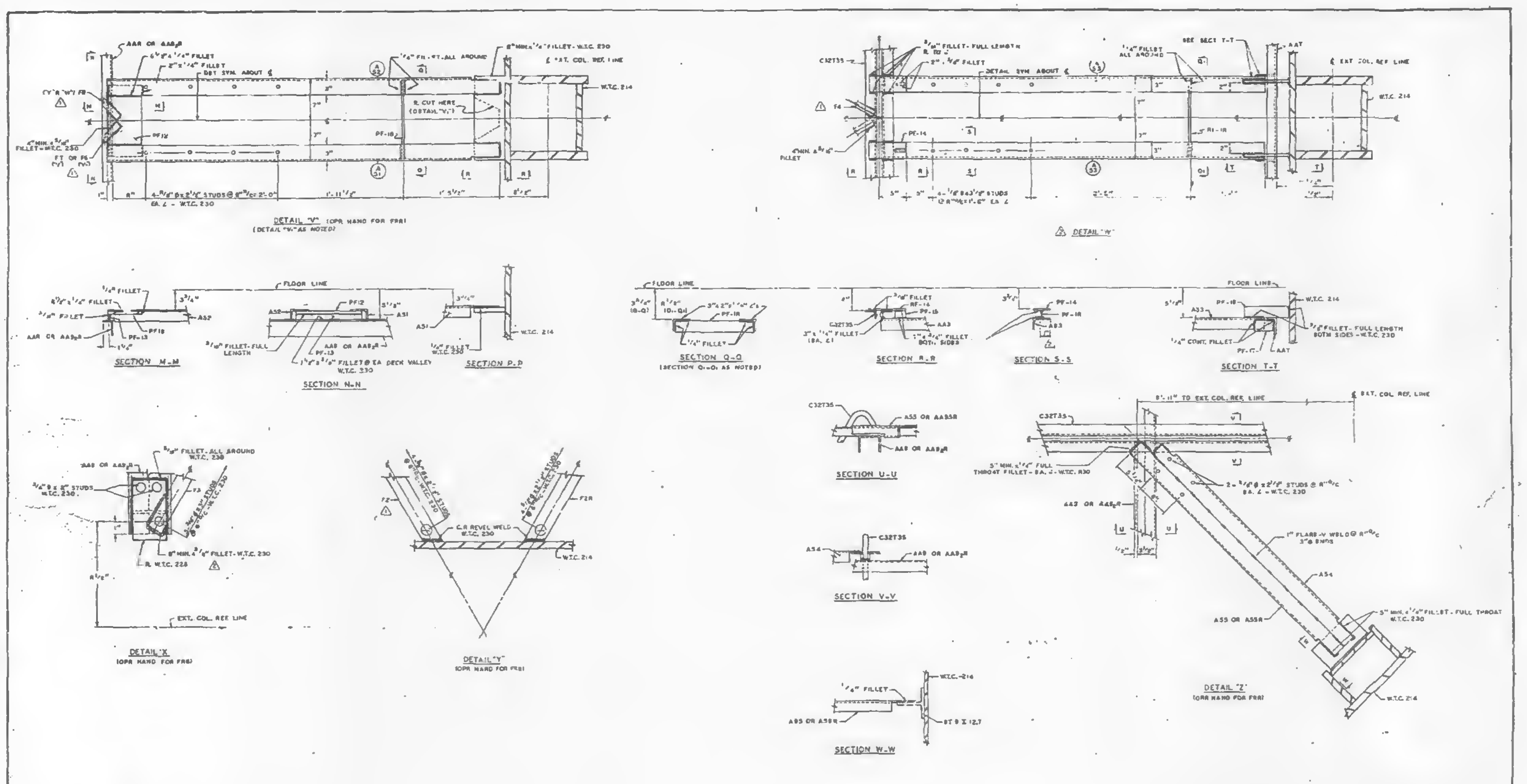
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CO 201, CO 204 & CO 229, 4..(1C)

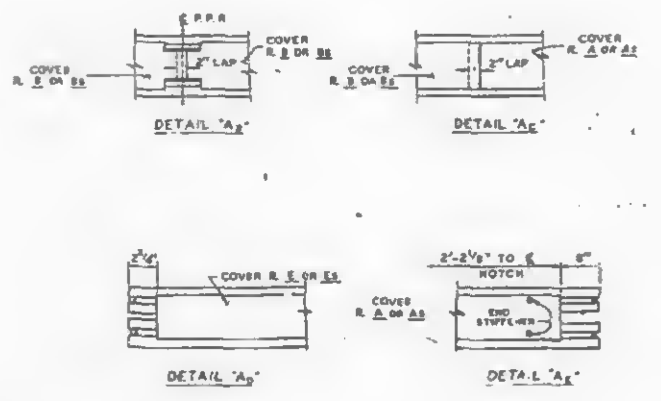
NO	DATE	REVISION	BY
2	4-29-69	AS NOTED	G.D.C.
1	4-10-69	GENERAL	G.D.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH)
PANEL F8 19'-6" x 59'-0 3/4"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-62
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 5/15/69
DRAWN BY [illegible] DATE FEB. 7, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T. M. CHURA DATE FEB. 7, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY A. CARL WEBER
FABRICATION CONT. NO. WTC 221
SHEET NO. FP-F8





ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN
RODS IN THE E-70 SERIES OR EQUAL.
UNLESS OTHERWISE NOTED ALL ARC WELDS BY W.T.C. 223.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

REF. DRWG.

7-A83-82	1-20-69	7-A84-48.1	11-29-68
7-A83-83	1-20-69	7-A84-21	1-8-68
SA-124	1-8-68	7-A84-22	1-8-69
7-A81-30	1-8-68	7-A84-22.1	7-22-68
7-A81-31	1-8-68	7-A84-23	7-22-68
7-A81-48	1-8-69	7-A84-24	10-19-68
7-A82-18	1-8-69	7-A84-28	7-22-68
7-A88-8	1-8-69		
7-A84-31.1	1-20-68		
7-A84-34.1	1-20-69		
7-A84-38.3	1-29-69		

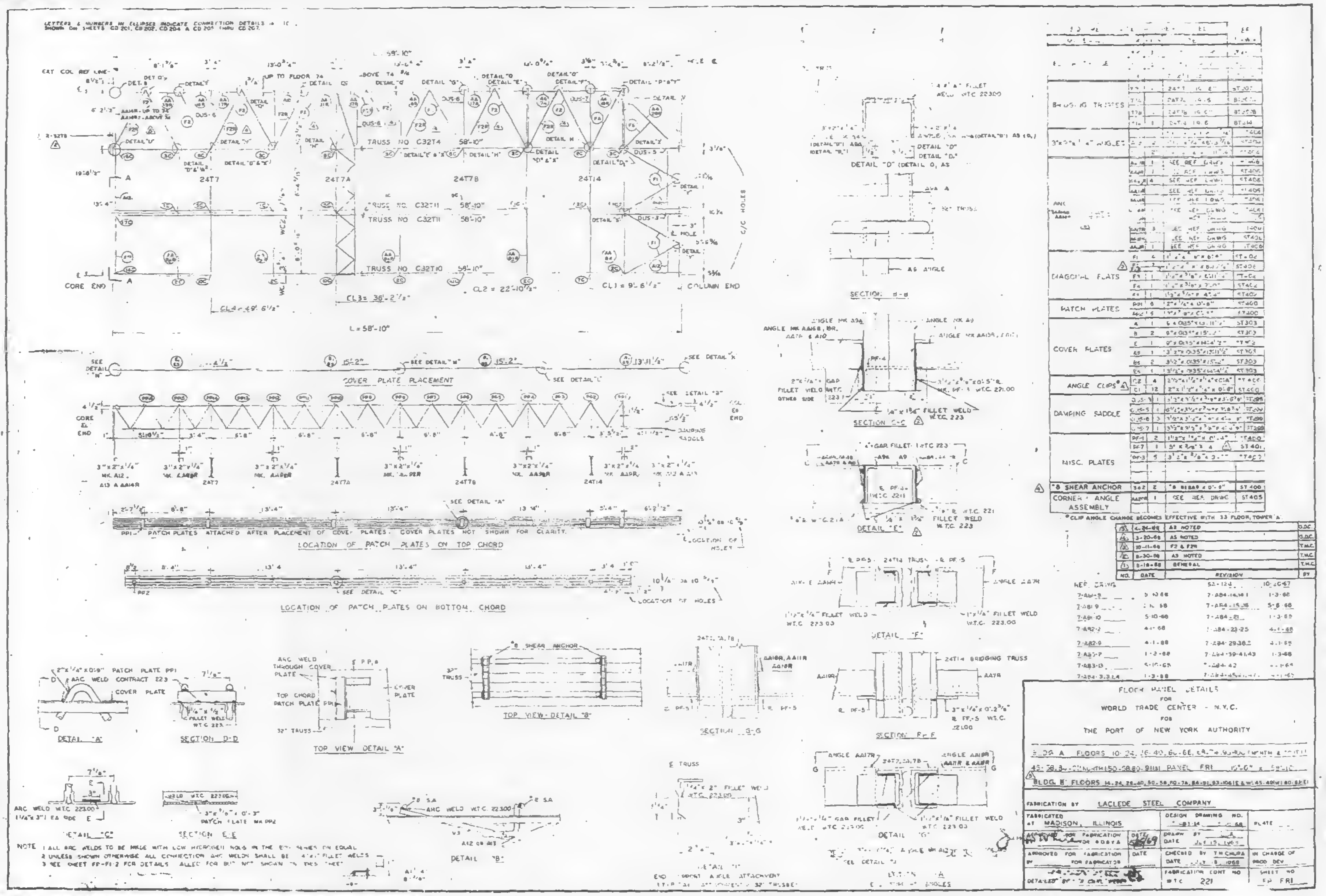
NO.	DATE	REVISION	BY
△	4-22-68	AS NOTED	GDC
1	4-10-69	AS NOTED	GDC

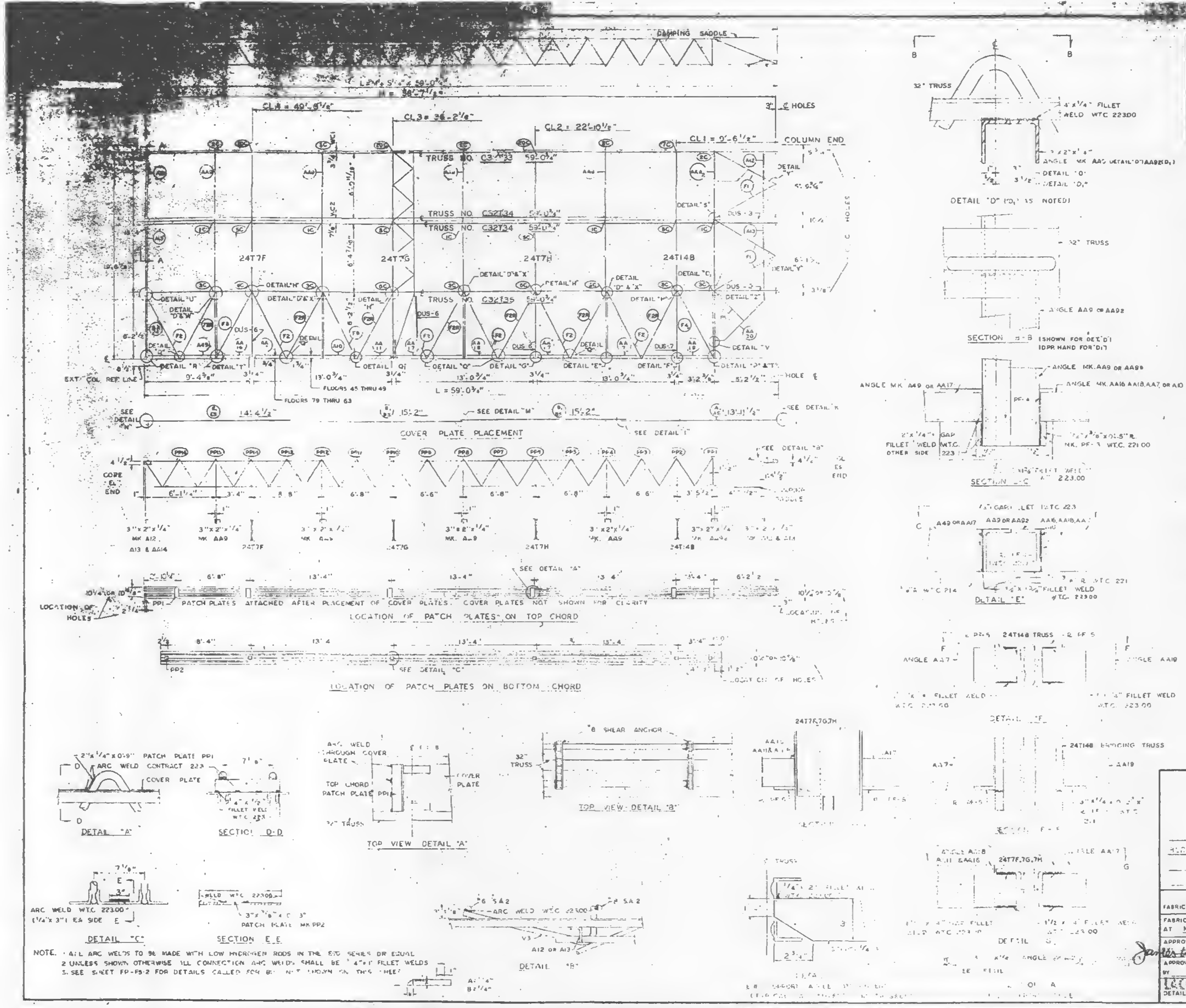
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS F8 & FR8.

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. T-A83-82 & 83	PLATE
APPROVED FOR FABRICATION BY W.T. FOR P.O.N.Y.A.	DATE 5/15/69	DRAWN BY gdc DATE FEB. 7, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE FEB. 7, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO. E. CARL VEREY		FABRICATION CONT. NO. W.T.C. 221	SHEET No. FP-F8 3


LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS AS SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207
EXT. COL. REF. LINE
CORE END
COLUMN END
TRUSS NO. C32T4 58'-10"
TRUSS NO. C32T11 58'-10"
TRUSS NO. C32T10 58'-10"
24T7
24T7A
24T7B
24T14
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-8 1/2"
L = 58'-10"
C/C HOLES
COVER PLATE PLACEMENT
SEE DETAIL "H"
SEE DETAIL "J"
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON TOP CHORD
PP1 - PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
LOCATION OF HOLES
DETAIL "D"
SECTION B-B
SECTION C-C
DETAIL "E"
DETAIL "F"
24T14 BRIDGING TRUSS
SECTION G-G
SECTION F-F
DETAIL "G"
DETAIL "A"
SECTION D-D
TOP VIEW DETAIL "A"
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR
DETAIL "C"
SECTION E-E
DETAIL "B"
ARC WELD W.T.C. 223.00
1/4" x 3" I EA. SIDE
3" x 1/8" x 0'-3" PATCH PLATE MK PP2
FILLET WELD W.T.C. 223.00
BRIDGING TRUSSES
DIAGONAL FLATS
PATCH PLATES
COVER PLATES
ANGLE CLIPS*
DAMPING SADDLE
MISC. PLATES
#8 SHEAR ANCHOR
CORNER ANGLE ASSEMBLY
SEE REF. DRWG ST 405
*CLIP ANGLE CHANGE BECOMES EFFECTIVE WITH 33 FLOOR, TOWER A.
5 | 4-24-69 | AS NOTED | G.D.C.
4 | 3-20-69 | AS NOTED | G.D.C.
3 | 10-11-68 | F2 & F2R | T.M.C.
2 | 8-30-68 | AS NOTED | T.M.C.
1 | 8-16-68 | GENERAL | T.M.C.
NO. | DATE | REVISION | BY
REF. DRWG.
7-A81-9 | 5-10-68
7-A81-9 | 5-10-68
7-A81-10 | 5-10-68
7-A82-2 | 4-1-68
7-A82-9 | 4-1-68
7-A82-7 | 1-2-68
7-A83-13 | 5-10-68
7-A84-3.3.14 | 1-3-68
52-128 | 10-30-67
7-A84-14,16 | 1-3-68
7-A84-15,16 | 5-8-68
7-A84-21 | 1-3-68
7-A84-23-25 | 4-1-68
7-A84-29,30 | 4-1-68
7-A84-39-41,43 | 1-3-68
7-A84-42
7-A84-45
NOTE 1 ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2 UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET WELDS.
3 SEE SHEET FP-F1-2 FOR DETAILS ALLOC. FOR BUT NOT SHOWN ON THIS SHEET.
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 10-24, 26-40, 60-66, 68-74, 95-106 (NORTH & SOUTH) 43-58, 84-91 (NORTH) 50-58, 80-91 (S) PANEL FR1 10'-0" x 58'-10"
BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-106 (E & W), 45-48 (W) 80-82 (E)
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO.
PLATE
APPROVED FOR FABRICATION BY FOR OD&YA
DATE 5/2/69
DRAWN BY
DATE JULY 15, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE
CHECKED BY T.M. CHURA
DATE JULY 18, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP FR1



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼"×1" FILLET WELDS
3. SEE SHEET FP-F5-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

REQUIRED MATERIAL

MATERIAL				
FLOOR TRUSSES	T33	1	[illegible]	[illegible]
	T34	2	[illegible]	[illegible]
	T35	1	C32T35 59'-0¾"	[illegible]
BRIDGING TRUSSES	T7F	1	24T7F-16'-4"	[illegible]
	T7G	1	24T7G-16'-4"	[illegible]
	T7H	1	24T7H-16'-4"	[illegible]
	T148	1	24T148-16'-5"	[illegible]
3"×2"×¼" ANGLES	A10	1	3"×2"×¼"×2'-7¹⁵⁄₁₆"	ST 404
	A12	2	3"×2"×¼"×5'-11¹⁵⁄₁₆"	ST 404
	A13	2	3"×2"×¼"×8'-3⁷⁄₁₆"	ST 404
	A49	1	3"×2"×¼"×8'-0⁷⁄₁₆"	ST 413
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST 404
	AA9	4	SEE REF. DRWG.	ST 404
	AA92	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 410
DIAGONAL FLATS	F1	4	1½"×⅝"×6'-8"	ST402
	F2	7	1½"×⅝"×5'-10½"	ST402
	F3	1	1½"×⅝"×6'-11¼"	ST402
	F4	1	1½"×⅝"×7'-0	ST402
	F5	1	1½"×⅝"×4'-4"	ST402
PATCH PLATES	PP1	6	2"×¼"×0'-9"	ST400
	PP2	6	3"×⅜"×0'-3"	ST400
COVER PLATES	A	1	9"×0.135"×13'-11½	ST303
	B	2	9"×0.135"×15'-2"	ST303
	E	1	9"×0.135"×14'-4½"	ST303
	AS	1	3½"×0.135"×13'-11½"	ST303
	BS	2	3½"×0.135"×15'-2	ST303
	ES	1	3½"×0.135"×14'-4½	ST303
ANGLE CLIPS	C2	7	2½"×1½"×¼"×0'-6	ST400
	C1	9	2"×1½"×¼"×0'-6"	ST400
DAMPING SADDLE	DUS-3	1	3½"×3½"×⅜"×3'-6⅝"	ST298
	DUS-5	1	3½"×3½"×⅜"×3'-6⅞"	ST299
	DUS-6	3	3½"×3½"×⅜"×4'-4⅞"	ST299
	DUS-7	1	3½"×3½"×⅜"×4'-4⅞"	ST298
MISC. PLATES	DF-1	2	1½"×½"×0'-4"	ST400
	PF3	5	3½"×[illegible]×0'-3"	ST400
CONN ANGLE	C5	1	3×2"×⅜"×0'-3"	ST413
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF. DRWG	ST405
#8 SHEAR ANCHOR	SA2	2	#8 REBAR ×0'-9"	ST 400

NO	DATE	REVISION	BY

REF. DRWG.

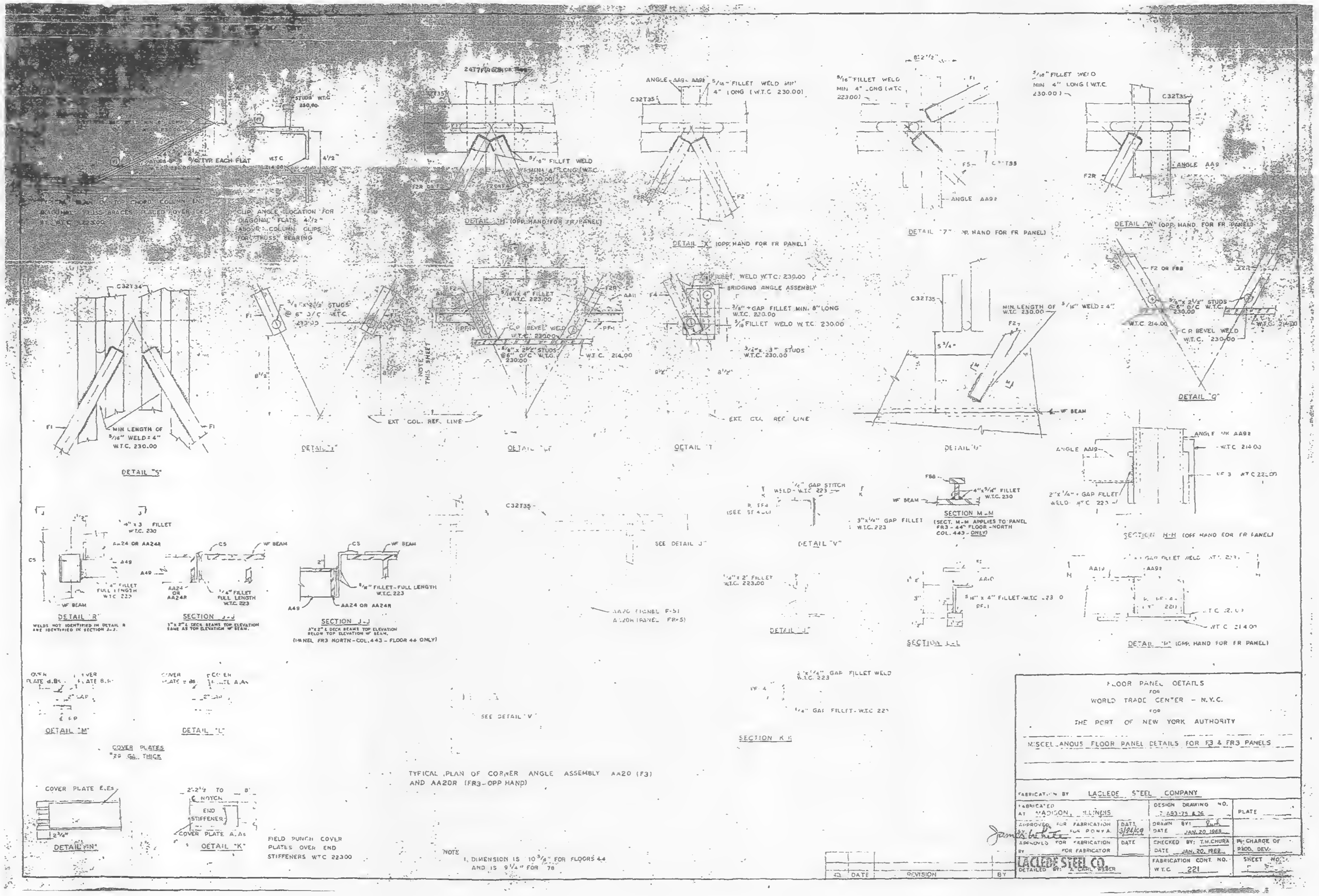
7-AB1-46	11-25-68	SA-124	1-6-69
7-AB1-47	11-25-68	7-AB4-14,14.1	10-15-68
7-AB1-48	11-25-68	7-AB4-15,16	7-22-68
7-AB2-2	7-22-68	7-AB4-21	7-22-68
7-AB2-9	7-22-68	7-AB4-23,25	7-22-68
7-AB1-70	11-25-68	7-AB4-29	1-3-69
7-AB3-75	11-25-68	7-AB4-39,41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB4-45	12-20-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (NORTH & SOUTH) 44 (NORTH)
PANEL F3 10'-5" × 59'-0¾"

FABRICATION BY LACLEDE STEEL CO.

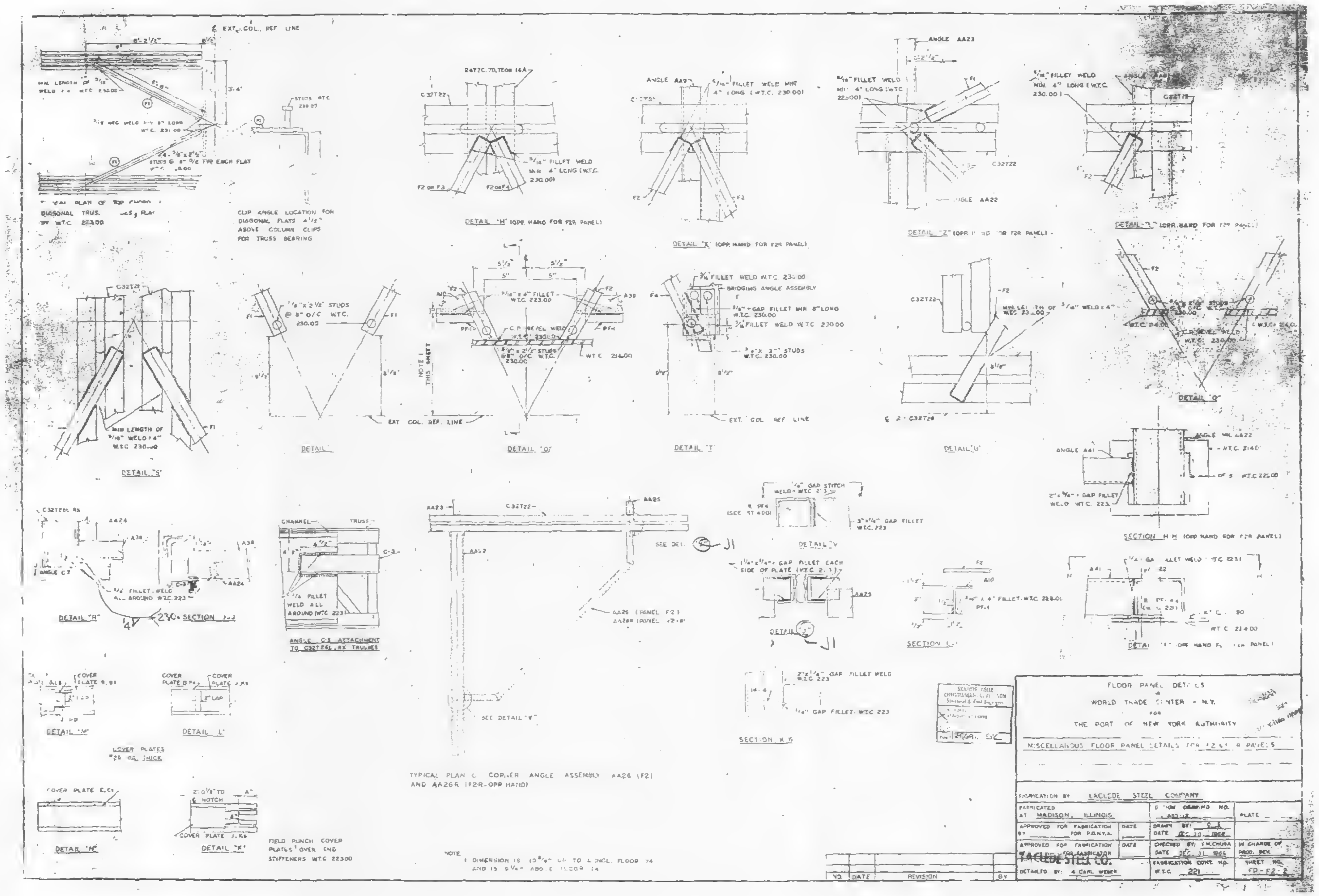
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-45	PLATE
APPROVED FOR FABRICATION BY James W. [illegible] FOR P.O.N.Y.A. DATE 3/24/69	DRAWN BY: C.E. DATE JAN. 17, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE	CHECKED BY: T.M. CHURA DATE JAN. 17, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A. CARL WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F3


DETAIL "S"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
C32T34
DETAIL "T"
EXT. COL. REF. LINE
NOTE 1 THIS SHEET
DETAIL "H" (OPP. HAND FOR FR PANEL)
DETAIL "X" (OPP. HAND FOR FR PANEL)
ANGLE AA9 - AA9R
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
DETAIL "Z" (OPP. HAND FOR FR PANEL)
DETAIL "W" (OPP. HAND FOR FR PANEL)
ANGLE AA9
C32T35
FILLET WELD W.T.C. 230.00
BRIDGING ANGLE ASSEMBLY
3/16" GAP FILLET MIN. 8" LONG W.T.C. 230.00
5/16 FILLET WELD W.T.C. 230.00
3/4" x 3" STUDS W.T.C. 230.00
C.P. BEVEL WELD W.T.C. 230.00
W.T.C. 214.00
DETAIL "Q"
WF BEAM
SECTION M-M
(SECT. M-M APPLIES TO PANEL FR3 - 44th FLOOR - NORTH COL. 443 - ONLY)
SECTION H-H (OPP. HAND FOR FR PANEL)
DETAIL "P" (OPP. HAND FOR FR PANEL)
DETAIL "R"
WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.
SECTION J-J
SECTION J-J
(PANEL FR3 NORTH - COL. 443 - FLOOR 44 ONLY)
AA24 OR AA24R
DETAIL "V"
DETAIL "J"
SECTION L-L
SEE DETAIL "V"
SECTION K-K
DETAIL "M"
DETAIL "L"
COVER PLATES 22 GA. THICK
COVER PLATE E, Es
DETAIL "N"
DETAIL "K"
END STIFFENER
COVER PLATE A, As
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F3) AND AA20R (FR3 - OPP HAND)
NOTE
1. DIMENSION IS 10 3/8" FOR FLOORS 44 AND IS 9 1/4" FOR 78
DATE
REVISION
BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F3 & FR3 PANELS

FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7 493-75 & 76	PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. — DATE 3/24/69	DRAWN BY: [illegible] DATE JAN. 20, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE	CHECKED BY: T.M.CHURA DATE JAN. 20, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. [illegible]


EXT. COL. REF. LINE
DIAGONAL TRUSS
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
DETAIL "H" (OPP. HAND FOR F2R PANEL)
DETAIL "X" (OPP. HAND FOR F2R PANEL)
DETAIL "Z" (OPP. HAND FOR F2R PANEL)
DETAIL "T" (OPP. HAND FOR F2R PANEL)
ANGLE AA23
ANGLE AA22
C32T22
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
DETAIL "S"
DETAIL
DETAIL "O"
DETAIL "J"
DETAIL "U"
DETAIL "Q"
BRIDGING ANGLE ASSEMBLY
EXT. COL. REF. LINE
NOTE 1 THIS SHEET
SECTION H-H (OPP. HAND FOR F2R PANEL)
DETAIL "R"
SECTION J-J
ANGLE C3 ATTACHMENT TO C32T22, RK TRUSSES
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA26 (F2) AND AA26R (F2R-OPP HAND)
AA26 (DOWEL F2)
AA26R (DOWEL F2-R)
SEE DETAIL "V"
DETAIL "V"
DETAIL "J1"
SECTION K-K
SECTION L-L
DETAIL "M"
DETAIL "L"
COVER PLATES 3/8" PL. THICK
COVER PLATE E.C.
DETAIL "N"
DETAIL "K"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
NOTE
1 DIMENSION IS 13 3/4" UP TO LOWER FLOOR 14 AND IS 6 1/4" ABOVE FLOOR 14

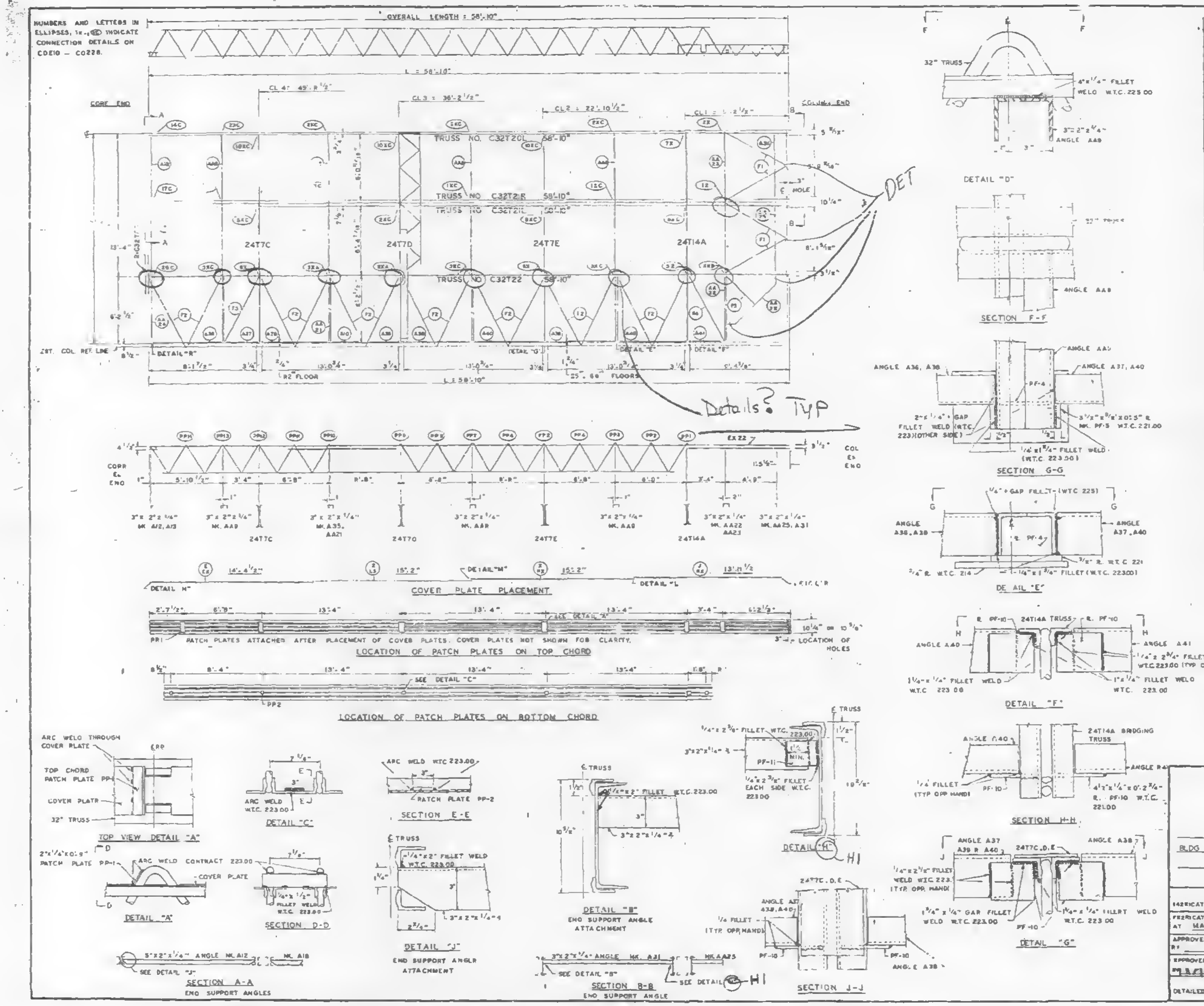
FLOOR PANEL DETAILS
@
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANEOUS FLOOR PANEL DETAILS FOR F2 & F2R PANELS

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. [illegible]	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY: [illegible] DATE DEC. 30 1966	
APPROVED FOR FABRICATION BY FOR FABRICATOR LACLEDE STEEL CO.	DATE	CHECKED BY: T.M.CHURA DATE DEC. 31 1966	IN CHARGE OF PROD. DEV.
DETAILED BY: 4 CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F2-2

NO.	DATE	REVISION	BY



NUMBERS AND LETTERS IN ELLIPSES, i.e. (15C) INDICATE CONNECTION DETAILS ON CDE10 — CO228.
OVERALL LENGTH = 58'-10"
CORE END
COLUMN END
TRUSS NO. C32T20L 58'-10"
TRUSS NO. C32T21L 58'-10"
TRUSS NO. C32T22 58'-10"
24T7C
24T7D
24T7E
24T14A
DET
Details? Typ
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION E-E
SECTION D-D
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
DETAIL "B"
END SUPPORT ANGLE ATTACHMENT
DETAIL "H"
H1
SECTION A-A
END SUPPORT ANGLES
SECTION B-B
END SUPPORT ANGLE
SECTION J-J
DETAIL "D"
SECTION F-F
SECTION G-G
DETAIL "E"
DETAIL "F"
SECTION H-H
DETAIL "G"

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T20L	1	C32T20L-58'-10"	ST220L
	T21L	1	C32T21L-58'-10"	ST221L
	~~T21R~~	1	~~C32T21R-58'-10"~~	
	T22	1	C32T22 58'-10"	ST222
BRIDGING TRUSSES	T7C	1	24T7C-19'-6"	ST207C
	T7D	1	24T7D-19'-6"	ST207D
	T7E	1	24T7E-19'-6"	ST207E
	T14A	1	24T14A-19'-6"	ST214A
A35? 3"x2"x1/4" ANGLES	A10	1	3"x2"x1/4"x2'-7 13/16"	ST404
	A12	1	3"x2"x1/4"x5'-11 1/2"	ST404
	A13	1	3"x2"x1/4"x6'-3 7/16"	ST404
	A35	1	3"x2"x1/4"x5'-8 [illegible]	ST409
	A36	1	3"x2"x1/4"x5'-1 1/2"	ST408
	A37	1	3"x2"x1/4"x2'-10"	ST409
	A38	3	3"x2"x1/4"x8'-4"	ST408
	[illegible]	[illegible]	3"x2"x1/4"x2'-8"	ST408
	A40	2	3"x2"x1/4"x6'-2"	ST409
	A41	1	3"x2"x1/4"x2'-10 3/4"	ST409
ANGLE ASSEMBLY	AA8	3	SEE REF DRWG	ST410
	AA21	1	SEE REF. DRWG	ST410
	AA22	1	SEE REF. DRWG	ST410
	AA23	1	SEE REF. DRWG	ST410
	AA24	1	SEE REF. DRWG	ST410
	AA25	1	SEE REF DRWG	ST410
	AA26	1	SEE REF. DRWG	ST410
PATCH PLATES	PP1	6	2"x1/4"x0'-8"	ST400
	PP2	6	3"x3/8"x0'-3"	ST400
COVER PLATES	A	1	9"x0.135"x13'-11 1/2"	ST303
	K6	1	3 1/2"x0.135"x13'-11 1/2"	ST304
	B	2	9"x0.135"x15'-2"	ST303
	B2	1	3 1/2"x.0135"x15'-2"	ST303
	L3	1	5 1/2"x.0135"x15'-2"	ST304
	E	1	9"x.0135"x14'-4 1/2"	ST303
	E2	1	3 1/2"x.0135"x14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2"x1 1/2"x1/4"x0'-6"	ST400
DIAGONAL FLATS	F1	4	1 1/2"x3/8"x8'-8"	ST402
	F2 F2L	1 1	1 1/2"x3/8"x8'-10 1/2"	ST402
	F3	1	1 1/2"x3/8"x8'-11 1/4"	ST402
	F4	1	1 1/2"x3/8"x7'-0 [illegible]	ST402
	F5	1	1 1/2"x3/8"x4'-4"	ST402
MISC. PLATES	PF-1	2	1 1/2"x1/2"x0'-4"	ST400
	PF-3	5	3 1/2"x3/8"x0'-5"	ST400
	PF-7	[illegible]	5"x3/4"x0'-4"	ST401
	PF-8		3 1/2"x3/4"x0'-2 7/8"	ST401
	PF-10	8	4 1/2"x1/4"x0'-2 3/4"	ST401
	PF-11	1	3"x1/4"x0'-8 [illegible]	ST412
	EX	1	SEE REF. DRWG	ST222
	22			

SKILLING, HELLE
CHRISTIANSEN, ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ REVISE
☐ REJECTED
Date 7-16-68 SK

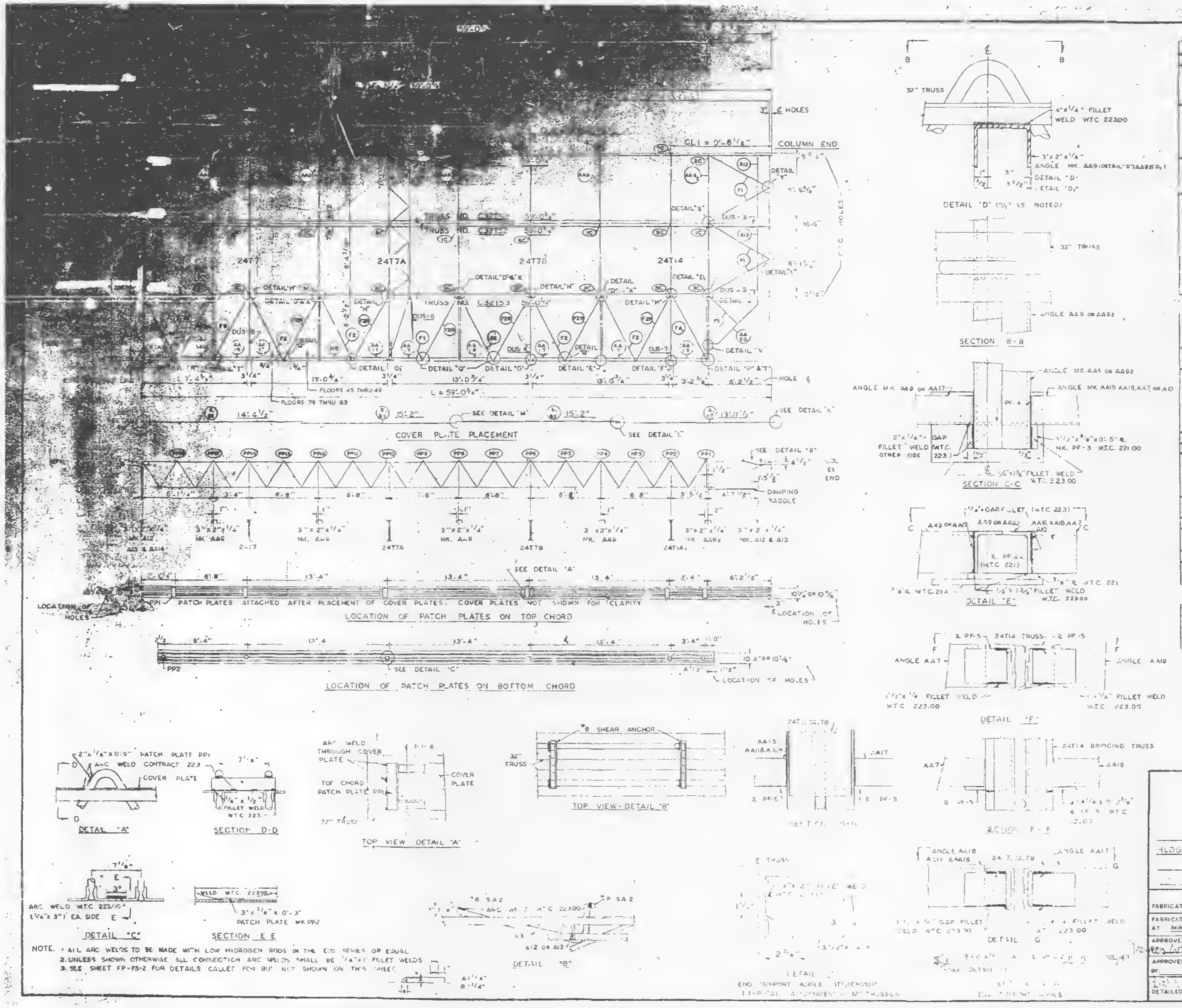
SEE SHEET FP-F2-1 FOR NOTES, REF. DRWG & ADDITIONAL DETAILS

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 29, 59 & 92 (NORTH & SOUTH)
PANEL F2 19'-6" x 58'-10"

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-34	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A	DATE	DRAWN BY: [illegible] DATE DEC 3, 1966	
APPROVED FOR FABRICATION BY LACLEDE STEEL CO.	DATE	CHECKED BY: T.M.CHURA DATE DEC 4 1966	IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F2



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" FILLET WELDS
3. SEE SHEET FP-F5-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL				
MATERIAL	MK	[illegible]	[illegible]	[illegible]
FLOOR TRUSSES	T51	1	C32T51-59'-0¾"	[illegible]
	T52	2	C32T52-59'-0¾"	[illegible]
	T53	1	C32T53 59'-0¾"	[illegible]
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	[illegible]
	T7A	1	24T7A - 19'-6"	[illegible]
	T7B	1	24T7B - 19'-6"	[illegible]
	T14	1	24T14 - 19'-6"	[illegible]
3"x2"x¼" ANGLES	A10	1	3"x2"x¼"x2'-7 [illegible]"	ST 404
	A12	1	3"x2"x¼"x5'-11 [illegible]"	ST 404
	A13	2	3"x2"x¼"x6'-3 [illegible]"	ST 404
	A49	1	[illegible]	ST 413
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG	ST 404
	AA5	4	SEE REF. DRWG.	ST 404
	AA52	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG	ST 404
	AA24	1	SEE REF. DRWG	ST 410
DIAGONAL FLATS	F1	4	1½"x⅝"x6'-6"	ST402
	F2 F2A	6* 7	1½"x⅝"x6'-10½"	ST402
	F3	1	1½"x⅝"x6'-11¼"	ST402
	F4	1	1½"x⅝"x7'-0	ST402
	F5	1	1½"x⅝"x4'-4"	ST402
PATCH PLATES	PP1	6	2"x¼"x0'-9"	ST400
	PP2	5	3"x⅜"x0'-3"	ST400
COVER PLATES	A	1	9"x0.135"x13'-11½	ST303
	B	2	9"x0.135"x15'-2"	ST303
	E	1	9"x0.135"x14'-4½"	ST303
	AS	1	3½"x0.135"x13'-11½"	ST303
	BS	2	3½"x0.135"x15'-2	ST303
	ES	1	3½"x0.135"x14'-4½"	ST303
DIAGONAL FLAT	F8A	*	SEE REF DRWG.	ST 415
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3½"x3½"x⅜"x3'-6⅞"	ST298
	DUS-5	1	3½"x3½"x⅜"x3'-6⅞"	ST299
	DUS-6	3	3½"x3½"x⅜"x4'-4⅞"	ST299
	DUS-7	1	3½"x3½"x⅜"x4'-4⅞"	ST299
MISC. PLATES	PF-1	2	1½"x½"x0'-4"	ST400
	PF-3	5	3½"x⅜"x0'-3"	ST400
CONN ANGLE	C5	1	3 x 2 x [illegible] x 0'-3	ST 413
ANGLE CLIP	C1	9	2"x1½"x¼"x0'-6"	ST400
	C2	7	2½"x1½"x¼"x0'-6"	ST400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST405

NO	DATE	REVISION	BY

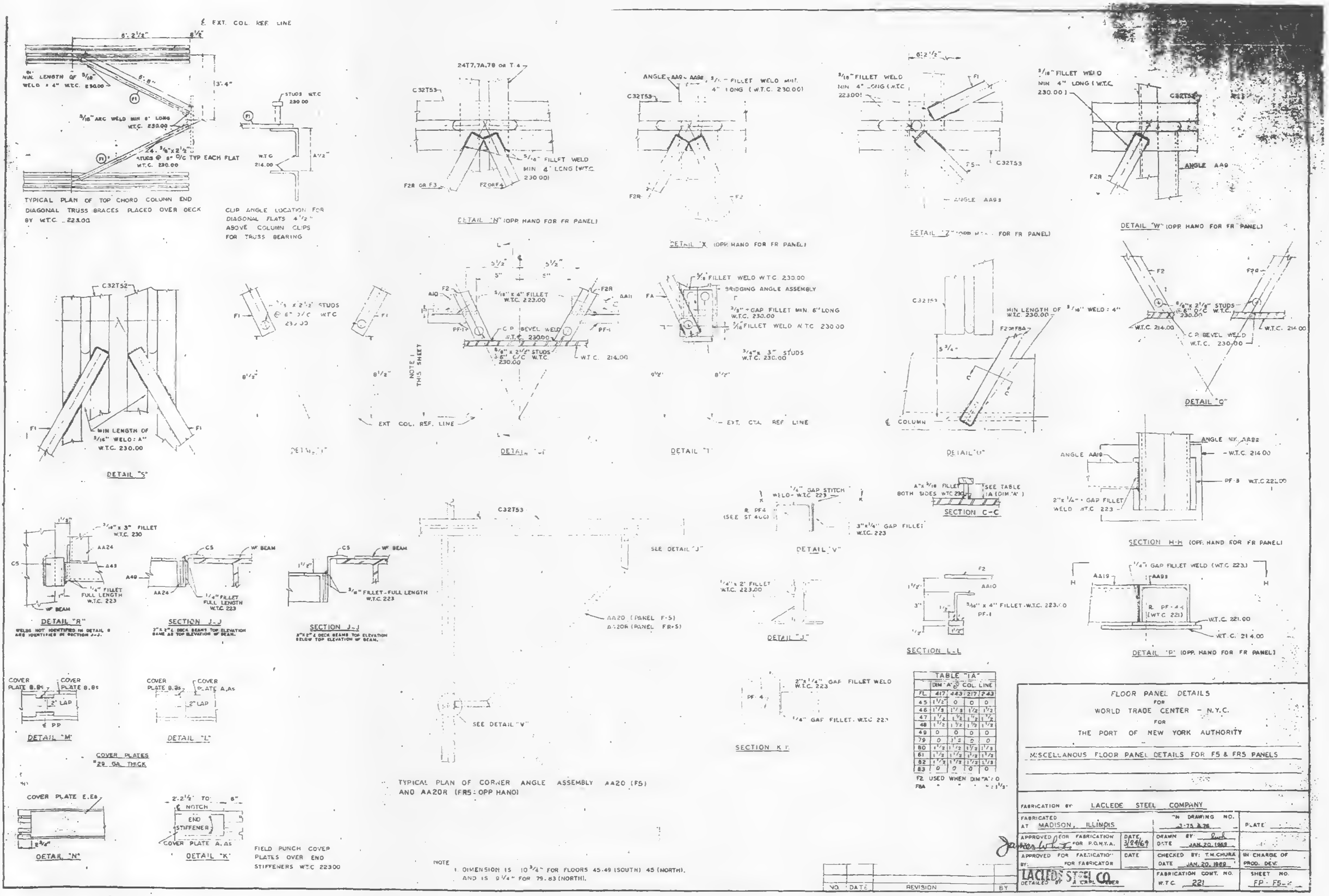
REF. DRWG			
7-AB1-46	11-25-68	SA-124	1-6-69
7-AB1-47	11-25-68	7-AB4-14,14.1	10-15-68
7-AB1-48	11-25-68	7-AB4-15,16	7-22-68
7-AB2-2	7-22-68	7-AB4-21	7-22-68
7-AB2-9	7-22-68	7-AB4-23,25	7-22-68
7-AB3-70	11-25-68	7-AB4-29	1-3-69
7-AB3-75	11-25-68	7-AB4-39-41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB4-45	12-20-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46-49 (SOUTH) 79-83 (NORTH)
PANEL F5 19'-5 x 59'-0¾"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-75	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 3/24/69	DRAWN BY: [illegible] DATE JAN 17, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE JAN 17, 1969	IN CHARGE OF PROD. [illegible]
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F5


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
6'-8"
3'-4"
F1
5/16" ARC WELD MIN 6" LONG W.T.C. 230.00
24-5/8"x2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C 230.00
W.T.C 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
24T7,7A,7B OR T 4
C32T53
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
F2R OR F3
F2 OR F4
DETAIL "H" (OPP. HAND FOR FR PANEL)
ANGLE AA9 - AA92, 5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
F2R
F2
DETAIL "X" (OPP. HAND FOR FR PANEL)
6'-2 1/2"
5/16" FILLET WELD MIN 4" LONG (W.T.C. 223.00)
F1
F5
C32T53
ANGLE AA93
DETAIL "Z" (OPP. HAND FOR FR PANEL)
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
C32T53
ANGLE AA9
F2R
DETAIL "W" (OPP. HAND FOR FR PANEL)
C32T52
F1
MIN LENGTH OF 5/16" WELD: A" W.T.C. 230.00
DETAIL "S"
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C 230.00
8 1/2"
NOTE 1 THIS SHEET
EXT. COL. REF. LINE
DETAIL "T"
5 1/2"
5 1/2"
5"
5"
AA10
F2
5/16" x 4" FILLET W.T.C. 223.00
F2R
AA11
PF-1
C.P. BEVEL WELD W.T.C. 230.00
PF-1
5/8" x 2 1/2" STUDS @ 6" C/C W.T.C. 230.00
W.T.C. 214.00
DETAIL "G"
FA
5/8" FILLET WELD W.T.C. 230.00
BRIDGING ANGLE ASSEMBLY
3/8" GAP FILLET MIN. 6" LONG W.T.C. 230.00
5/16" FILLET WELD W.T.C. 230.00
3/4" x 3" STUDS W.T.C. 230.00
9 1/2"
8 1/2"
EXT. COL. REF. LINE
DETAIL "T"
C32T53
MIN LENGTH OF 5/16" WELD: 4" W.T.C. 230.00
F2 OR F8A
5 3/4"
C
℄ COLUMN
DETAIL "U"
F2
F2R
5/8"x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
W.T.C. 214.00
C.P. BEVEL WELD W.T.C. 230.00
W.T.C. 214.00
DETAIL "Q"
ANGLE AA22
ANGLE AA19
W.T.C. 214.00
PF-3 W.T.C. 223.00
2"x 1/4" GAP FILLET WELD W.T.C. 223
SECTION H-H (OPP. HAND FOR FR PANEL)
1 1/8"
5/16" x 3" FILLET W.T.C. 230
AA24
C5
A43
1/4" FILLET FULL LENGTH W.T.C. 223
WF BEAM
DETAIL "R"
WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.
C5
WF BEAM
A49
AA24
1/4" FILLET FULL LENGTH W.T.C. 223
SECTION J-J
3"x2"∠ DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION WF BEAM.
C5
WF BEAM
1 1/2"
3/8" FILLET-FULL LENGTH W.T.C. 223
SECTION J-J
2"x2"∠ DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION WF BEAM.
C32T53
SEE DETAIL "J"
AA20 (PANEL F-5)
AA20R (PANEL FR-5)
SEE DETAIL "V"
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F5) AND AA20R (FR5: OPP HAND)
1/4" GAP STITCH WELD- W.T.C. 223
K
K
R PF4 (SEE ST 400)
3"x1/4" GAP FILLET W.T.C. 223
DETAIL "V"
A"x 5/16 FILLET BOTH SIDES W.T.C 230
SEE TABLE IA (DIM "A")
SECTION C-C
1/4"x 2" FILLET W.T.C. 223.00
DETAIL "J"
F2
1 1/2"
AA10
3"
1/2"
5/16" x 4" FILLET-W.T.C. 223.00
PF-1
1/2"
1 1/2"
SECTION L-L
1/4" GAP FILLET WELD (W.T.C. 223)
AA19
AA93
H
H
R PF-4 (W.T.C. 221)
W.T.C. 221.00
W.T.C. 214.00
DETAIL "P" (OPP. HAND FOR FR PANEL)
PF-4
2"x1/4" GAP FILLET WELD W.T.C. 223
1/4" GAP FILLET- W.T.C 223
SECTION K-K
COVER PLATE B.Bs
COVER PLATE B.Bs
2" LAP
℄ PP
DETAIL "M"
COVER PLATE B.Bs
COVER PLATE A.As
2" LAP
DETAIL "L"
COVER PLATE E.Es
2 3/4"
DETAIL "N"
2'-2 1/2" TO 6"
℄ NOTCH
END STIFFENER
COVER PLATE A.As
DETAIL "K"

COVER PLATES #29 GA. THICK

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

NOTE
1. DIMENSION IS 10 3/4" FOR FLOORS 45-49 (SOUTH) 45 (NORTH), AND IS 9 1/4" FOR 79-83 (NORTH).

TABLE "IA"

	DIM "A" @ COL. LINE			
FL.	417	443	217	243
45	1 1/2	0	0	0
46	1 1/2	1 1/2	1 1/2	1 1/2
47	1 1/2	1 1/2	1 1/2	1 1/2
48	1 1/2	1 1/2	1 1/2	1 1/2
49	0	0	0	0
79	0	1 1/2	0	0
80	1 1/2	1 1/2	1 1/2	1 1/2
81	1 1/2	1 1/2	1 1/2	1 1/2
82	1 1/2	1 1/2	1 1/2	1 1/2
83	0	0	0	0

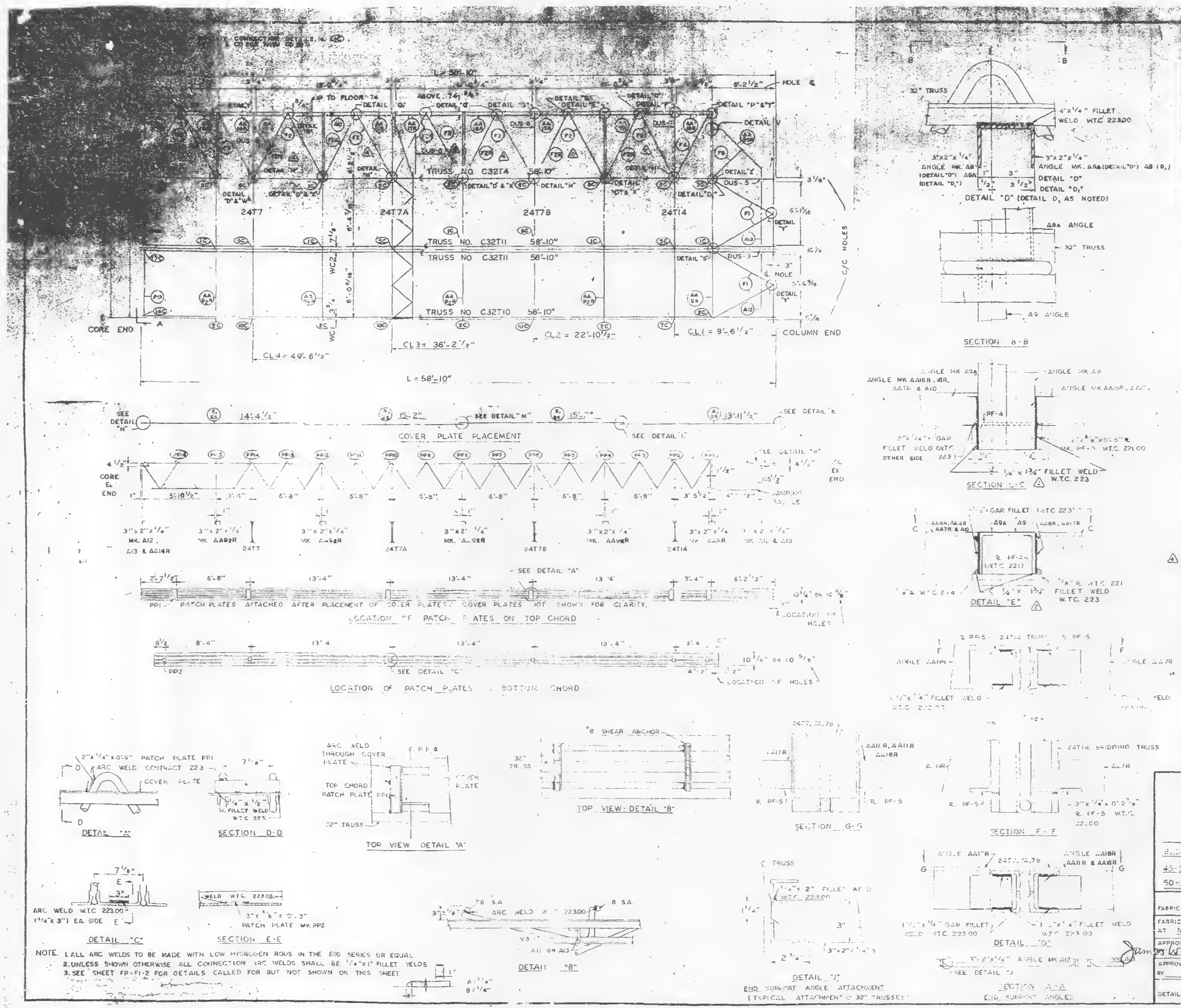
F2 USED WHEN DIM "A" = 0
F8A " " " " = 1 1/2

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F5 & FR5 PANELS

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
TH DRAWING NO. 3-75 & 76
PLATE
APPROVED FOR FABRICATION BY: James White FOR P.O.N.Y.A. DATE 3/24/69
DRAWN BY: [illegible] DATE JAN. 20, 1969
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M. CHURA DATE JAN. 20, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F5-2

NO.	DATE	REVISION	BY



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

REQUIRED MATERIAL [illegible]

MATERIAL	MK	PCS	[illegible]	[illegible]
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	[illegible]
	T11	2	C32T11 - 58'-10"	[illegible]
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST207
	T7A	1	24T7A - 19'-6"	ST207A
	T7B	[illegible]	[illegible]	[illegible]
	T14	1	24T14 - 19'-6"	[illegible]
3" x 2" x 1/4" ANGLES	A10	1	3" x 2" x 1/4" x 2'-7 [illegible]	ST404
	A13	2	3" x 2" x 1/4" x 6'-3 [illegible]	ST404
	A12	2	3" x 2" x 1/4" x 5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA9.2R	4	SEE REF. DRWG.	ST406
	AA11R	1	SEE REF. DRWG.	ST406
	AA14R	1	SEE REF. DRWG.	ST406
	AA15R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA19R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
△3	F2 F2R	7	1 1/2" x 5/8" x 6'-10 1/2"	ST402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 5/8" x 7'-0"	ST402
	F5	1	1 1/2" x 5/8" x 4'-4"	ST402
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST400
	PP2	6	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST303
	B	2	9" x .0135" x 15'-2"	ST303
	E	1	9" x .0135" x 14'-4 1/2"	ST303
	AS	1	3 1/2" x .0135" x 13'-11 1/2"	ST303
	BS	2	3 1/2" x .0135" x 15'-2"	ST303
	ES	1	3 1/2" x .0135" x 14'-4 1/2"	ST303
ANGLE CLIPS* △4	C2	4	2" x 1 1/2" x 1/4" x 0'-6"	ST401
	C1	12	2" x 1 1/2" x 1/4" x [illegible] 5"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x [illegible]-6 7/8"	ST299
	DUS-5	[illegible]	3 1/2" x 3 1/2" x 3/8" x [illegible]-6 7/8"	ST299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x [illegible]-4 7/8"	ST299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x [illegible] 8"	ST299
MISC. PLATES	PF-1	2	1 1/2" x 1/2" x 0'-4"	ST400
	PF-7	1	5" x 3/8" x 4" △2	ST401
	PF-3	5	3 1/2" x 3/8" x 0 [illegible]	ST400
△4 #8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
CORNER ANGLE ASSEMBLY	AA[illegible]	1	SEE REF. DRWG	ST405

*CLIP ANGLE CHANGE BECOMES EFFECTIVE WITH 33rd FLOOR, TOWER "A".

NO	DATE	REVISION	BY
△4	3-20-69	AS NOTED*	G.D.C.
△3	10-11-68	F2 & F2R	T.M.C.
△2	9-30-68	AS NOTED	T.M.C.
1	9-19-68	GENERAL	T.M.C.

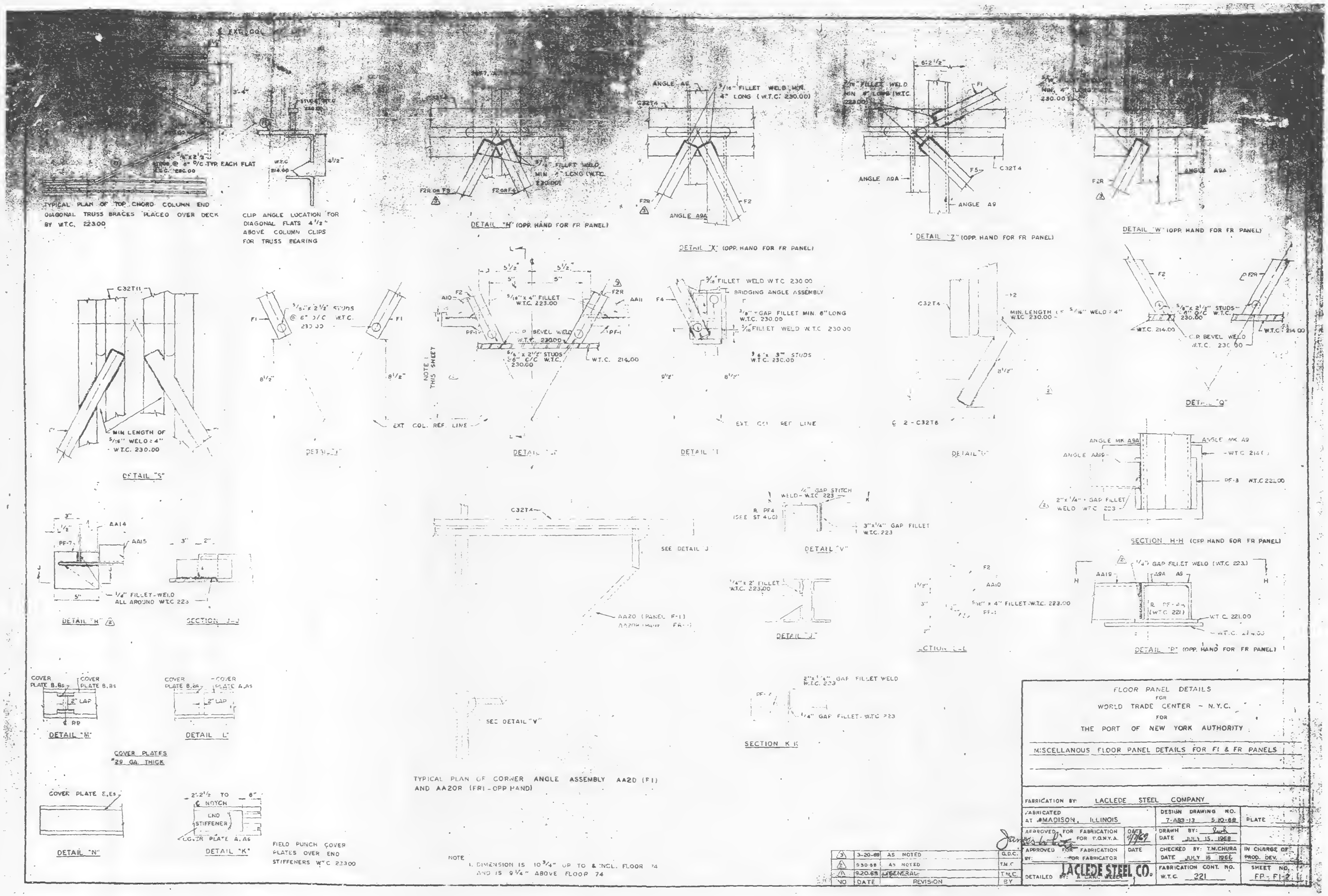
REF. DRWG.		SA-124	10-20-67
7-AB1-9	5-10-68	7-AB4-14, 14.1	1-3-68
7-AB1-9	5-10-68	7-AB4-15, 16	5-8-68
7-AB1-10	5-10-68	7-AB4-21	1-3-66
7-AB2-7	4-1-68	7-AB4-23-25	4-1-68
7-AB2-9	4-1-68	7-AB4-29-38.2	4-1-68
7-AB3-2	1-3-68	7-AB4-39-41, 43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3, 3.1, 4	1-3-68	7-AB4-45, 47, 47.1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 94-9? (NORTH) PANEL FR1 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-14 5-10-68	PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A	DATE 4/7/69	DRAWN BY: [illegible] DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR1


EXT. COL.
3'-4"
STUDS W.T.C. 230.00
5/8" x 2 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
W.T.C. 214.00
4 1/2"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
F2R OR F5
F2 OR F4
DETAIL "H" (OPP. HAND FOR FR PANEL)
ANGLE A9
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
C32T4
F2R
F2
ANGLE A9A
DETAIL "X" (OPP. HAND FOR FR PANEL)
6'-2 1/2"
5/16" FILLET WELD MIN 4" LONG (W.T.C. 223.00)
F1
F5
C32T4
ANGLE A9A
ANGLE A9
DETAIL "Z" (OPP. HAND FOR FR PANEL)
5/16" FILLET WELD MIN. 4" LONG W.T.C. 230.00
F2R
ANGLE A9A
DETAIL "W" (OPP. HAND FOR FR PANEL)
C32T11
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
DETAIL "S"
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
F1
8 1/2"
DETAIL
5 1/2"
5"
5/16" x 4" FILLET W.T.C. 223.00
A10
F2
F2R
AA11
PF-1
C.P. BEVEL WELD W.T.C. 230.00
5/8" x 2 1/2" STUDS @ 6" C/C W.T.C. 230.00
W.T.C. 214.00
NOTE 1 THIS SHEET
EXT. COL. REF. LINE
DETAIL
F4
5/16" FILLET WELD W.T.C. 230.00
BRIDGING ANGLE ASSEMBLY
3/8" GAP FILLET MIN. 6" LONG W.T.C. 230.00
5/16" FILLET WELD W.T.C. 230.00
3/4" x 3" STUDS W.T.C. 230.00
9 1/2"
8 1/2"
EXT. COL. REF. LINE
DETAIL
C32T4
F2
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
8 1/2"
℄ 2 - C32T8
DETAIL
F2
F2R
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
W.T.C. 214.00
C.P. BEVEL WELD W.T.C. 230.00
W.T.C. 214.00
DETAIL "Q"
ANGLE MK A9A
ANGLE MK A9
ANGLE AA19
W.T.C. 214.00
PF-3 W.T.C. 221.00
2" x 1/4" GAP FILLET WELD W.T.C. 223
SECTION H-H (OPP. HAND FOR FR PANEL)
3"
1/2"
AA14
AA15
PF-7
5"
1/4" FILLET-WELD ALL AROUND W.T.C. 223
DETAIL "R"
SECTION J-J
C32T4
SEE DETAIL J
AA20 (PANEL F-1)
AA20R (PANEL FR-1)
1/4" GAP STITCH WELD - W.T.C. 223
R. PF4 (SEE ST 400)
3" x 1/4" GAP FILLET W.T.C. 223
DETAIL "V"
1/4" x 2" FILLET W.T.C. 223.00
DETAIL "J"
F2
AA10
1 1/2"
3"
5/16" x 4" FILLET W.T.C. 223.00
PF-1
SECTION L-L
1/4" GAP FILLET WELD (W.T.C. 223)
AA19
A9A
A9
H
R. PF-4 (W.T.C. 221)
W.T.C. 221.00
W.T.C. 214.00
DETAIL "P" (OPP. HAND FOR FR PANEL)
COVER PLATE B.Bs
COVER PLATE B.Bs
2" LAP
℄ RR
DETAIL "M"
COVER PLATE B.Bs
COVER PLATE A.As
2" LAP
DETAIL "L"
COVER PLATES #29 GA. THICK
SEE DETAIL "V"
2"x 1/4" GAP FILLET WELD W.T.C. 223
PF-4
1/4" GAP FILLET - W.T.C. 223
SECTION K-K
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR) - OPP HAND)
COVER PLATE E.Es
DETAIL "N"
2'-2 1/2 TO ℄ NOTCH
6"
END STIFFENER
COVER PLATE A.As
DETAIL "K"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

NOTE
1. DIMENSION IS 10 3/4" UP TO & INCL. FLOOR 74 AND IS 9 1/4" ABOVE FLOOR 74

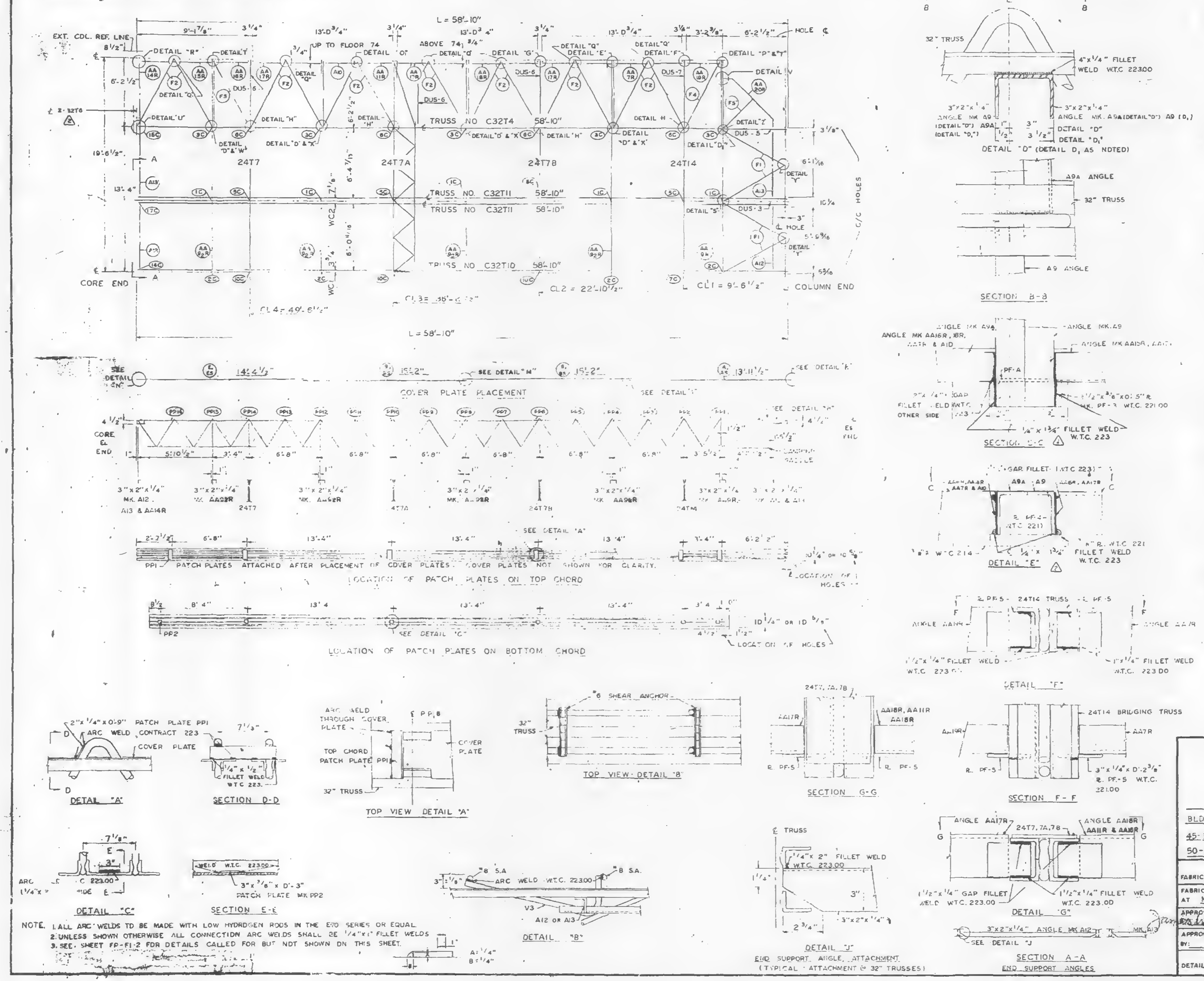
NO.	DATE	REVISION	BY
3	3-20-69	AS NOTED	G.D.C.
2	9-30-68	AS NOTED	T.M.C.
1	9-20-68	GENERAL	T.M.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-13 5-10-68
PLATE
APPROVED FOR FABRICATION BY: James White FOR P.O.N.Y.A. DATE 4/1/69
DRAWN BY: Ruk DATE JULY 15, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE JULY 16 1968
IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER
LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F1-2

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (IC).
SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.



NOTE.
1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	TID	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	TA	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-8"	BT207
	T7A	1	24T7A - 19'-8"	BT207A
	T78	1	24T78 - 19'-8"	BT207B
	T14	1	24T14 - 19'-6"	BT214
3"x2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x2'-7 5/16"	ST404
	A13	2	3"x2"x1/4"x6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA9R	4	SEE REF. DRWG.	ST406
	AA11R	1	SEE REF. DRWG.	ST406
	AA14R	1	SEE REF. DRWG.	ST406
	AA15R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA19R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
(3)	F2 F2R	7 7	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8"x A'-A"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST400
	PP2	5	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x.0135"x13'-11 1/2"	ST303
	B	2	9"x.0135"x15'-2"	ST303
	E	1	9"x.0135"x14'-4 1/2"	ST303
	AS	1	3 1/2"x.0135"x13'-11 1/2"	ST303
	BS	2	3 1/2"x.0135"x15'-2"	ST303
	ES	1	3 1/2"x.0135"x14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2"x1 1/2"x1/4"x0'-6"	ST400
#8 SHEAR ANCHOR	SA2	2	#6 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST299
	DUS-5	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-7	1	5"x 3/8"x 4" (2)	ST401
	PF-3	5	3 1/2"x 3/8"x 0'-5"	ST400
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG	ST405

NO	DATE	REVISION	BY
(3)	10-11-68	F2 & F2R	T.M.C.
(2)	9-30-68	AS NOTED	T.M.C
1	8-19-68	GENERAL	T.M.C.

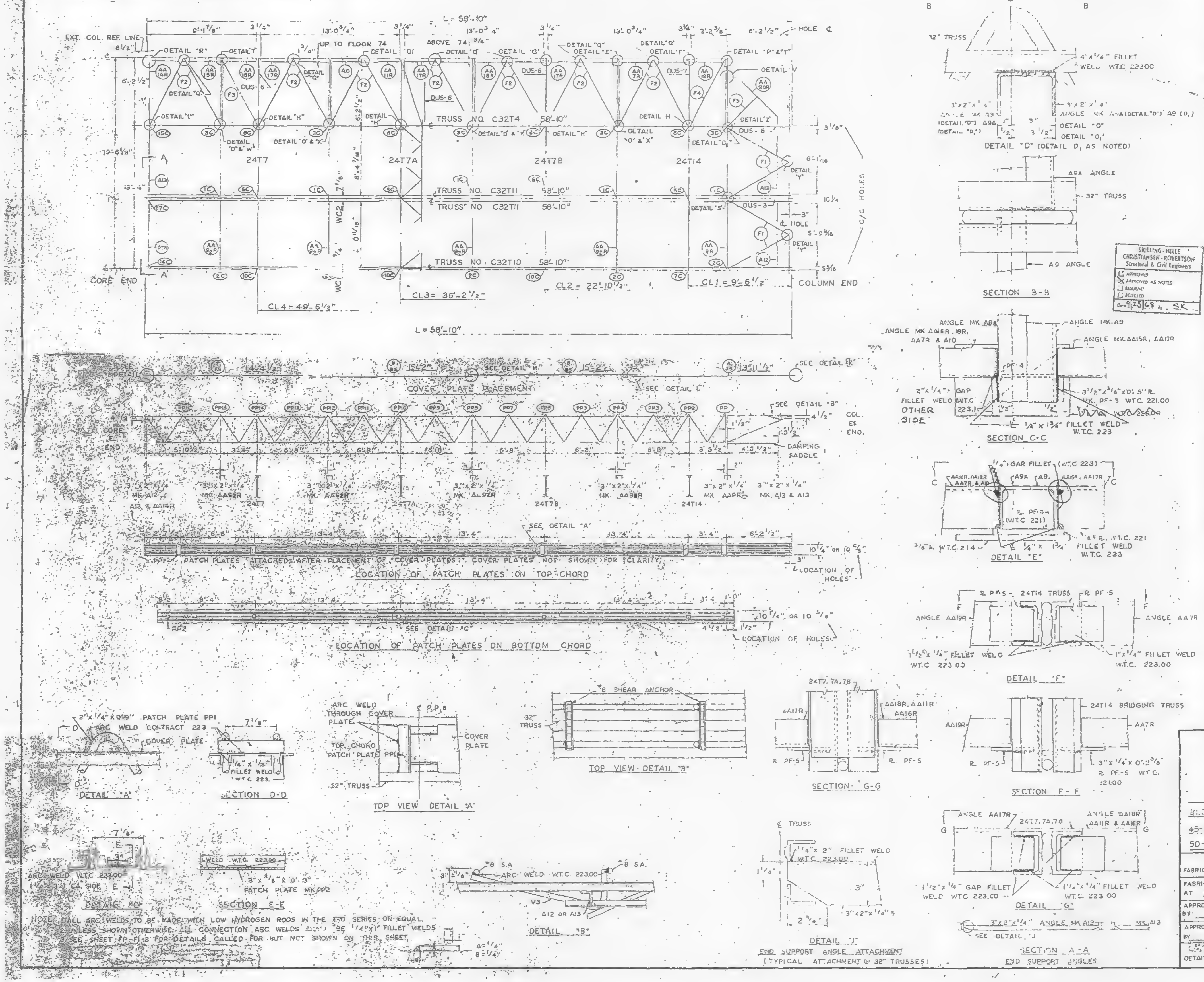
REF. DRWG			
7-AB1-8	5-10-68	SA-124	10-20-67
7-AB1-9	5-10-68	7-AB4-14,14.1	1-3-68
7-AB1-10	5-10-68	7-AB4-15,16	5-8-68
7-AB2-2	4-1-68	7-AB4-21	1-3-68
7-AB2-9	4-1-68	7-AB4-23-25	4-1-68
7-AB3-7	1-3-68	7-AB4-29,38.2	4-1-68
7-AB3-13	5-10-68	7-AB4-39,41,43	1-3-68
7-AB4-3,3.1,4	1-3-68	7-AB4-42	4-1-68
		7-ABA-45,47,47.1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
45-58, 84-91 (NORTH) PANEL FR1 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-14 5-10-68
PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE 10/14/68
DRAWN BY: L.R. DATE JULY 15, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE JULY 16, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-FR1

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. ⓘⓒ. SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.



NOTE: 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS.
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 9 25 68 SK

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST207
	T7A	1	24T7A - 19'-6"	ST207A
	T7B	1	24T7B - 19'-6"	ST207B
	T14	1	24T14 - 19'-6"	ST214
3"x2"x 1/4" ANGLES	A10	1	3" x 2" x 1/4" x 2'-[illegible] 7/16"	ST404
	A13	2	3" x 2" x 1/4" x 6'-3 7/16"	ST404
	A12	2	3" x 2" x 1/4" x 5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA8R	1	SEE REF. DRWG.	ST406
	AA9R	4	SEE REF. DRWG.	ST406
	AA11R	1	SEE REF. DRWG.	ST406
	AA14R	1	SEE REF. DRWG.	ST406
	AA15R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA19R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
	F2	14	1 1/2" x 5/8" x 8'-10 1/2"	ST402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 5/8" x 7'-0"	ST402
	F5	1	1 1/2" x 5/8" x 4'-4"	ST402
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST400
	PP2	6	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST303
	B	2	9" x .0135" x 15'-2"	ST303
	E	1	9" x .0135" x 14'-4 1/2"	ST303
	As	1	3 1/2" x .0135" x 13'-11 1/2"	ST303
	Bs	2	3 1/2" x .0135" x 15'-2"	ST303
	Es	1	3 1/2" x .0135" x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST400
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST299
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2" x 1/2" x 0'-4"	ST400
	PF-7	1	5" x 3/4" x 4"	ST401
	PF-3	5	3 1/2" x 3/8" x 0'-3"	ST400
			3/8	
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG	ST405

NO	DATE	REVISION	BY
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.

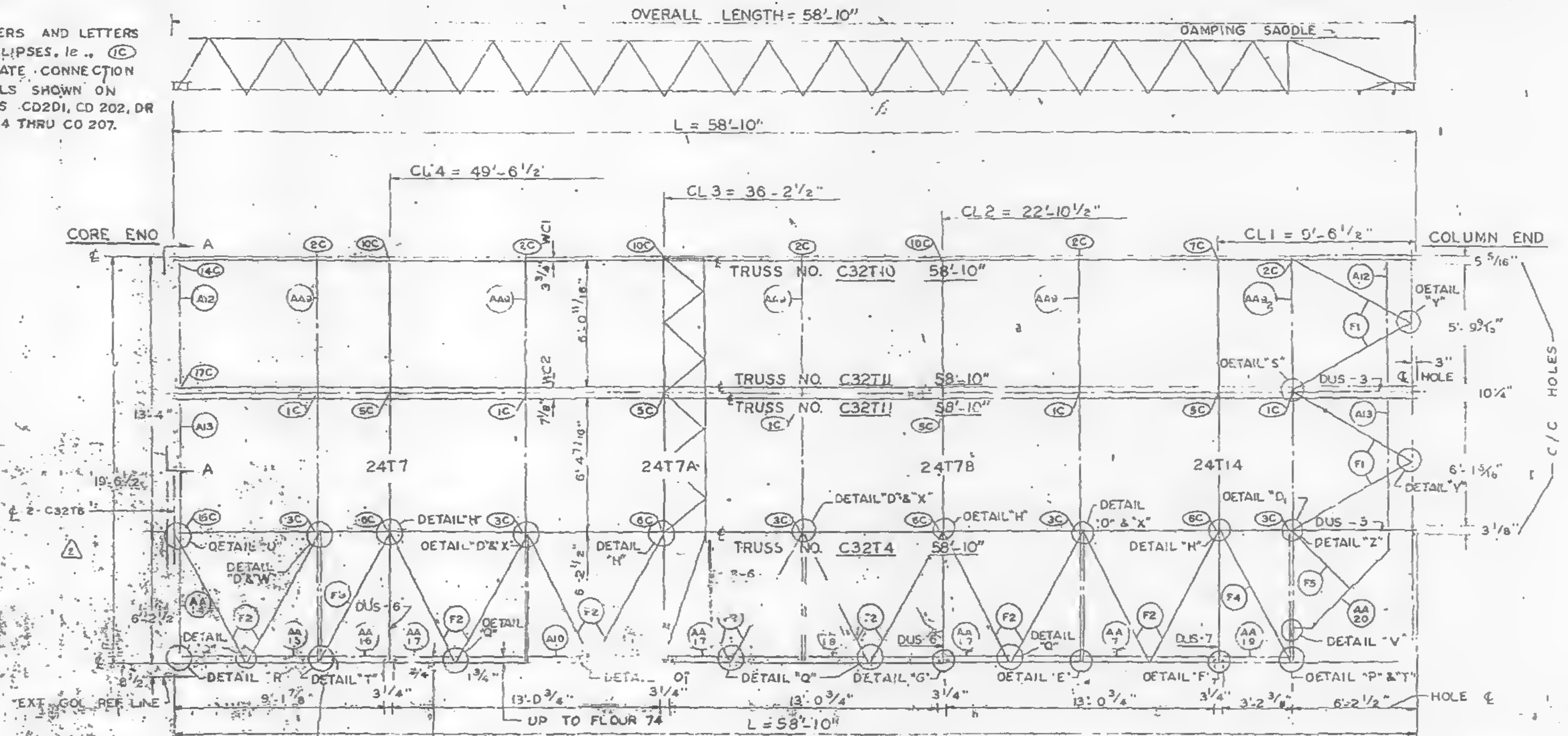
7-AB1-8	5-10-68	SA-124	10-20-67
7-AB1-9	5-10-68	7-AB4-14, 14.1	1-3-68
7-AB1-10	5-10-68	7-AB4-15, 16	5-6-68
7-AB2-2	4-1-68	7-AB4-21	1-3-68
7-AB2-9	4-1-68	7-AB4-23-25	4-1-68
7-AB3-2	1-3-68	7-AB4-29, 38.2	4-1-68
7-AB3-13	5-10-68	7-AB4-39-41, 43	1-3-68
7-AB4-3, 3.1, 4	1-3-68	7-AB4-42	4-1-68
		7-AB4-45, 47, 47.1	4-1-68

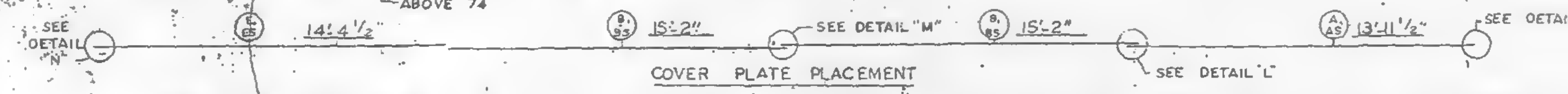
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 84-91 (NORTH) PANEL FR1 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

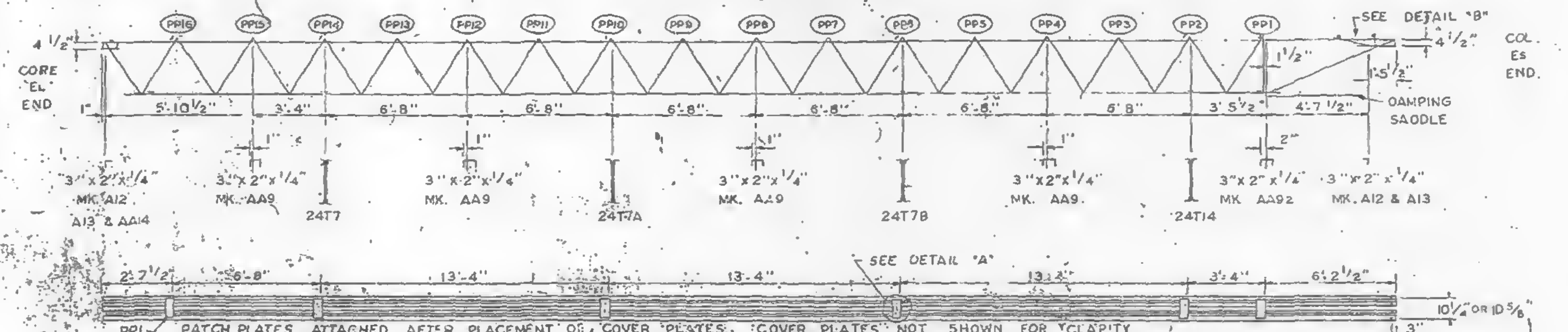
FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-14 5-10-68
PLATE -
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE
DRAWN BY: J.R.
DATE JULY 15, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
LACLEDE STEEL CO.
CHECKED BY: T.M.CHURA
DATE JULY 16, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-FR1

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202, DR CO 204 THRU CO 207.



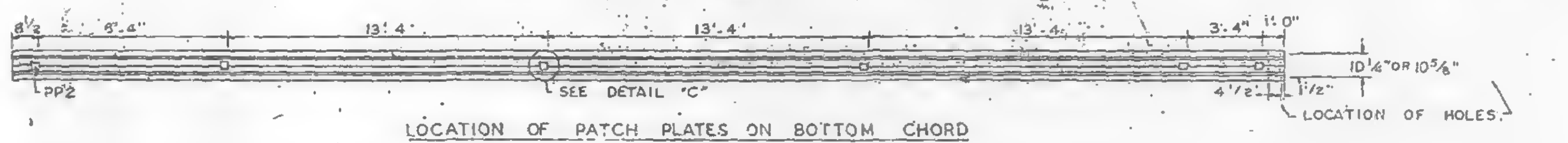


COVER PLATE PLACEMENT

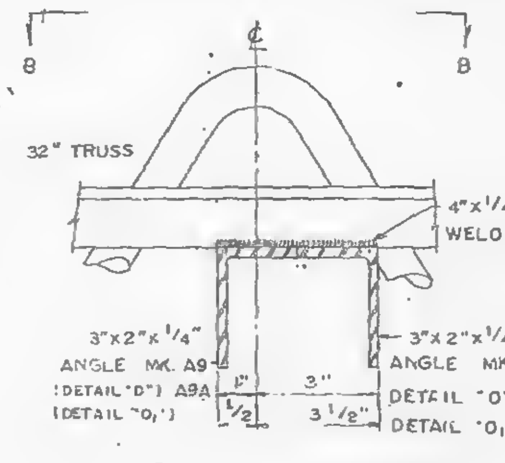


PP1 PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

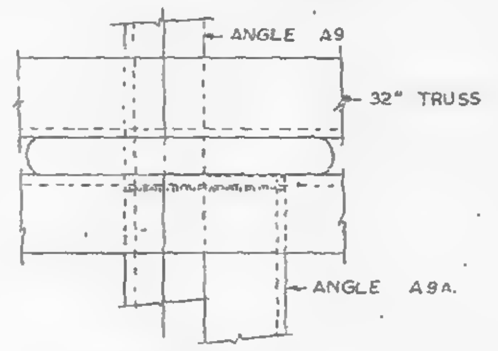
LOCATION OF PATCH PLATES ON TOP CHORD



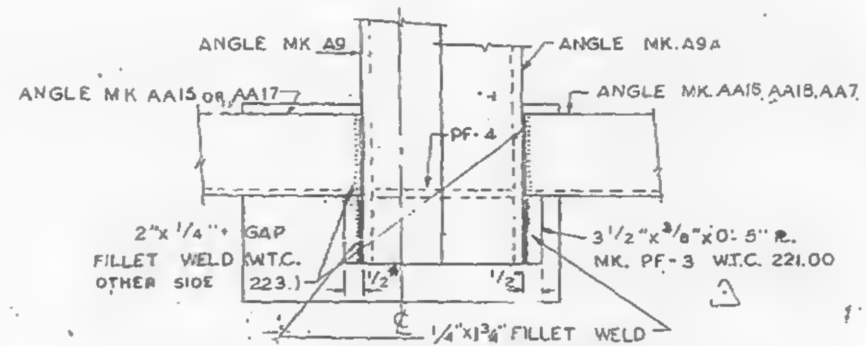
LOCATION OF PATCH PLATES ON BOTTOM CHORD


32" TRUSS
4" x 1/4" FILLET WELD W.T.C. 22300
3" x 2" x 1/4" ANGLE MK. A9 (DETAIL "O") A9A (DETAIL "O1")
3" x 2" x 1/4" ANGLE MK. A9A (DETAIL "O") A9 (O1)

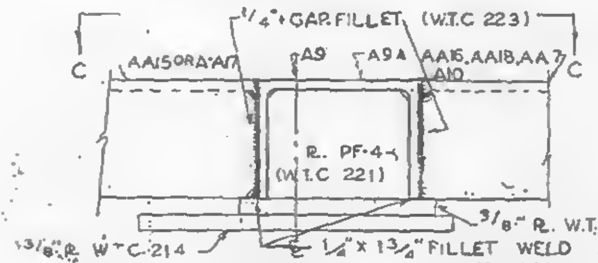
DETAIL "O" ("O1" AS NOTED)



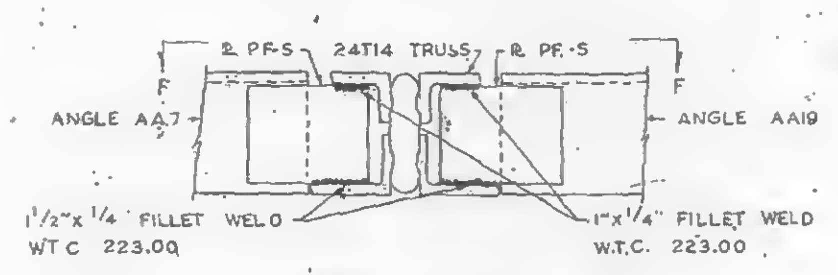
SECTION B-B


ANGLE MK. A9
ANGLE MK. A9A
ANGLE MK AA15 OR AA17
ANGLE MK. AA16, AA18, AA7, OR A10
PF-4
2" x 1/4" GAP FILLET WELD OTHER SIDE (W.T.C. 223.)
1/4" x 1 3/4" FILLET WELD W.T.C. 223.00
3 1/2" x 3/8" x 0'-5" PL. MK. PF-3 W.T.C. 221.00

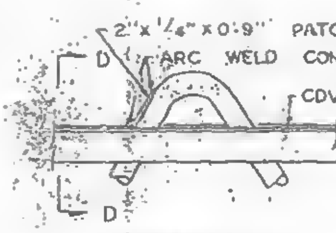
SECTION C-C



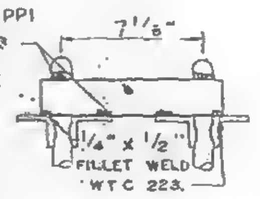
DETAIL "E"


PL. PF-5
24T14 TRUSS
PL. PF-5
ANGLE AA7
ANGLE AA19
1 1/2" x 1/4" FILLET WELD W.T.C. 223.00
1" x 1/4" FILLET WELD W.T.C. 223.00

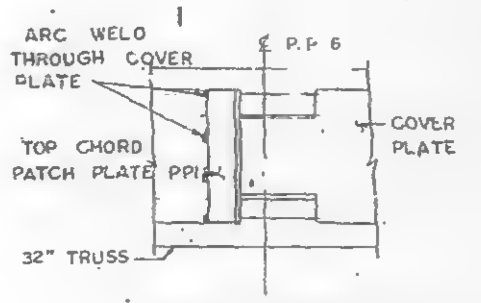
DETAIL "F"



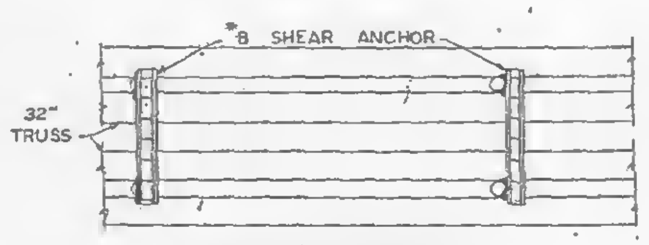
DETAIL "A"



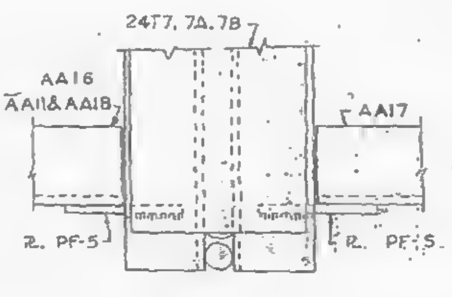
SECTION D-D



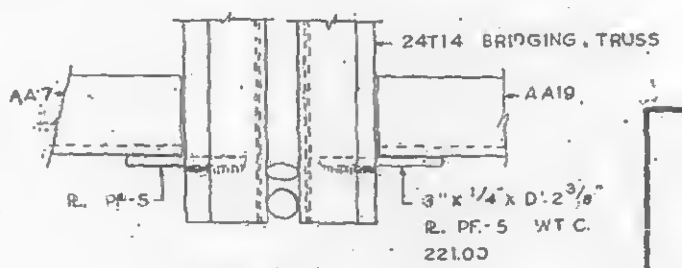
TOP VIEW DETAIL "A"



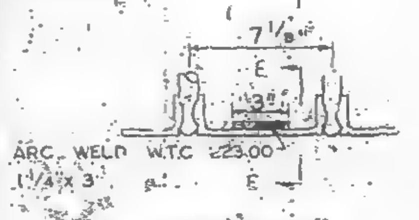
TOP VIEW - DETAIL "B"



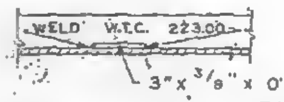
SECTION G-G



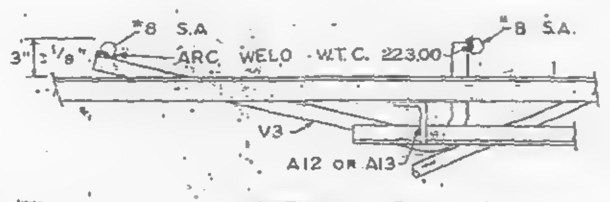
SECTION F-F



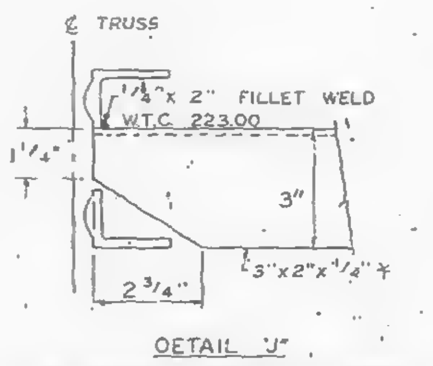
DETAIL "C"



SECTION E-E

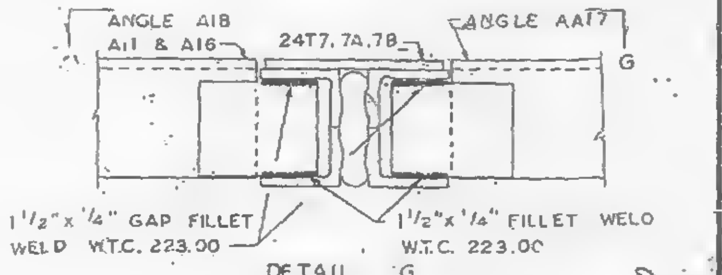


DETAIL "B"

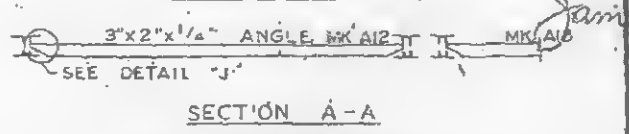


DETAIL "J"

END SUPPORT ANGLE ATTACHMENT (TYPICAL ATTACHMENT @ 32" TRUSSES)


ANGLE A18 A11 & A16
24T7, 7A, 7B
ANGLE AA17
1 1/2" x 1/4" GAP FILLET WELD W.T.C. 223.00
1 1/2" x 1/4" FILLET WELD W.T.C. 223.00

DETAIL "G"



SECTION A-A

END SUPPORT ANGLES

NOTE, 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	BT207
	T7A	1	24T7A - 19'-6"	BT207A
	T7B	1	24T7B - 19'-6"	BT207B
	T14	1	24T14 - 19'-6"	BT214
3"x2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x 2'-7 15/16"	ST404
	A13	2	3"x2"x1/4"x 6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x 5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST404
	AA9	4	SEE REF. DRWG.	ST404
	AA92	1	SEE REF. DRWG.	ST404
	AA11	1	SEE REF. DRWG.	ST404
	AA14	1	SEE REF. DRWG.	ST404
	AA15	.	SEE REF. DRWG.	ST404
	AA16	1	SEE REF. DRWG.	ST404
	AA17	3	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA19	1	SEE REF. DRWG.	ST404
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
	△3 F2 F2R	7 7	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8 x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST400
	PP2	5	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x.0135"x13'-11 1/2"	ST303
	B	2	9"x.0135"x15'-2"	ST303
	E	1	9"x.0135"x14'-4 1/2"	ST303
	As	1	3 1/2"x.0135"x13'-11 1/2"	ST303
	Bs	2	3 1/2"x.0135"x15'-2	ST303
	Es	1	3 1/2"x.0135"x14'-4 1/2	ST303
ANGLE CLIPS	C2	16	2 1/2"x1 1/2"x1/4"x0'-6"	ST400
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST298
	DUS-5	1	3 1/2"x3 1/2"x3/8"x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-7	1	5"x3/8"x 4"	ST401
	PF-3	5	3 1/2"x 3/8"x 0'-5"	ST400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF. DRWG	ST405

NO	DATE	REVISION	BY
△3	10-11-68	F2 & F2R	T.M.C.
△2	9-30-68	AS NOTED	T.M.C.
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.

		SA-124	10-20-67
7-AB1-8	5-10-68	7-AB4-14, 14.1	1-3-68
7-AB1-9	5-10-68	7-AB4-15, 16	5-6-68
7-AB1-10	5-10-68	7-AB4-21	1-3-68
7-AB2-2	4-1-68	7-AB4-23, 25	4-1-68
7-AB2-9	4-1-68	7-AB4-29, 38.2	4-1-68
7-AB3-2	1-3-68	7-AB4-39-41, 43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3, 3.1, 4	1-3-68	7-AB4-45, 47, 47.1	4-1-68

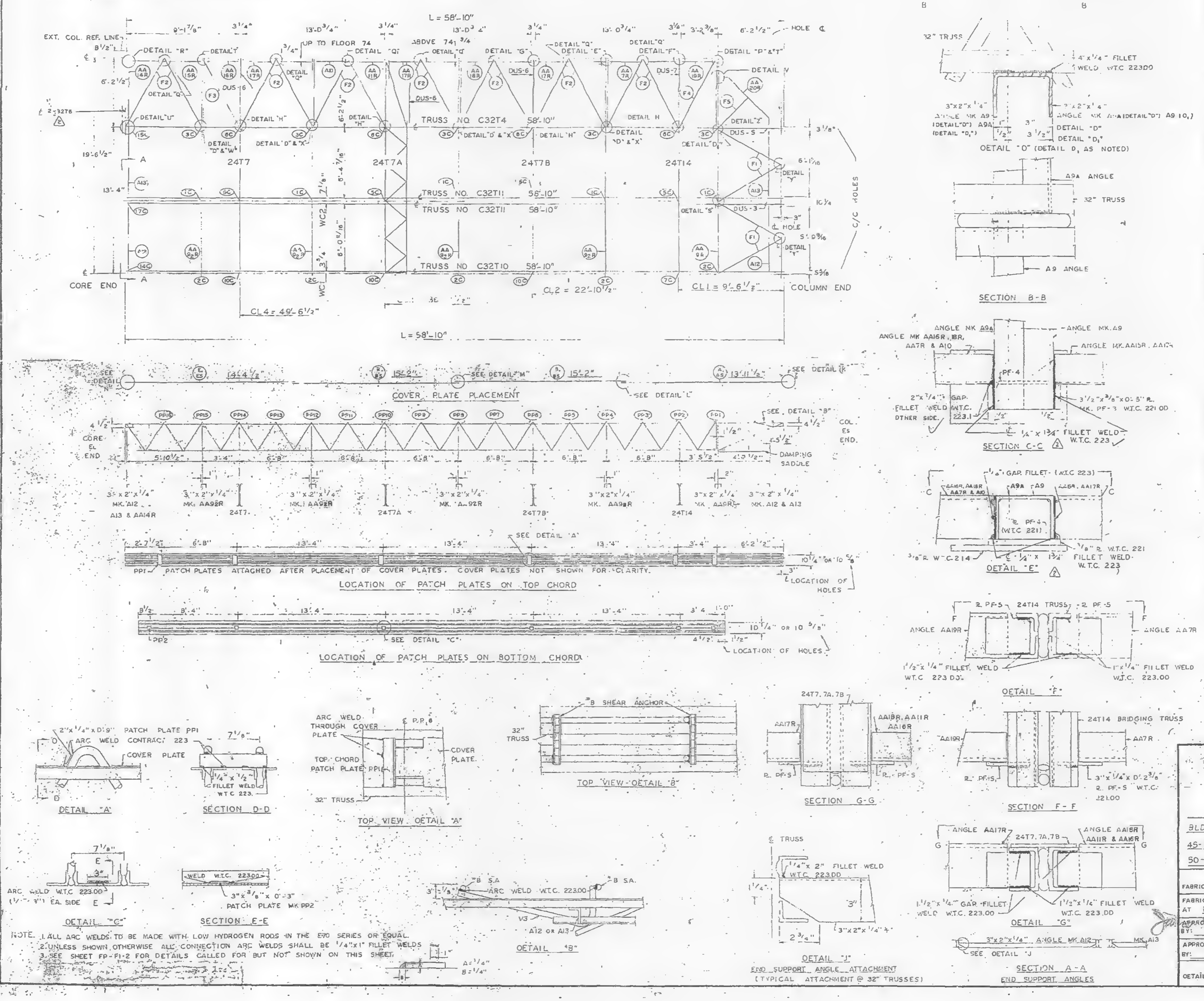
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 79-91 (SOUTH) PANEL F1 19'-6" x 58'-10"
46-58, 84-91 (NORTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-13 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 10/14/68	DRAWN BY: DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. 1C, SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST2[illegible]
	T11	2	C32T11 58'-10"	ST2[illegible]
	T4	1	C32T4 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	BT207
	T7A	1	24T7A - 19'-6"	BT207A
	T7B	1	24T7B - 19'-6"	BT207B
	T14	1	24T14 - 19'-6"	BT214
3"x2"x1/4" ANGLES	A10	1	3"x2"x1/4"x2' 5/16"	ST404
	A13	2	3"x2"x1/4"x6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x5'-11"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA92R	4	SEE REF. DRWG	ST406
	AA11R	1	SEE REF. DRWG.	ST406
	AA14R	1	SEE REF. DRWG.	ST406
	AA15R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA19R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
	F2	14	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8"x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST400
	PP2	6	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x.0135"x 13'-11 1/2"	ST303
	B	2	9"x.0135"x 15'-2"	ST303
	E	1	9"x.0135"x 14'-4 1/2"	ST303
	AS	1	3 1/2"x.0135"x 13'-11 1/2"	ST303
	BS	2	3 1/2"x.0135"x 15'-2"	ST303
	ES	1	3 1/2"x.0135"x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST400
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8"x 3'-8 7/8"	ST299
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-7	1	5"x 3/8"x 4" ⚠2	ST401
	PF-3	5	3 1/2"x 3/8"x 0'-[illegible]	ST400
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG	ST405

NO	DATE	REVISION	BY
2	9-30-68	AS NOTED.	T.M.C.
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.

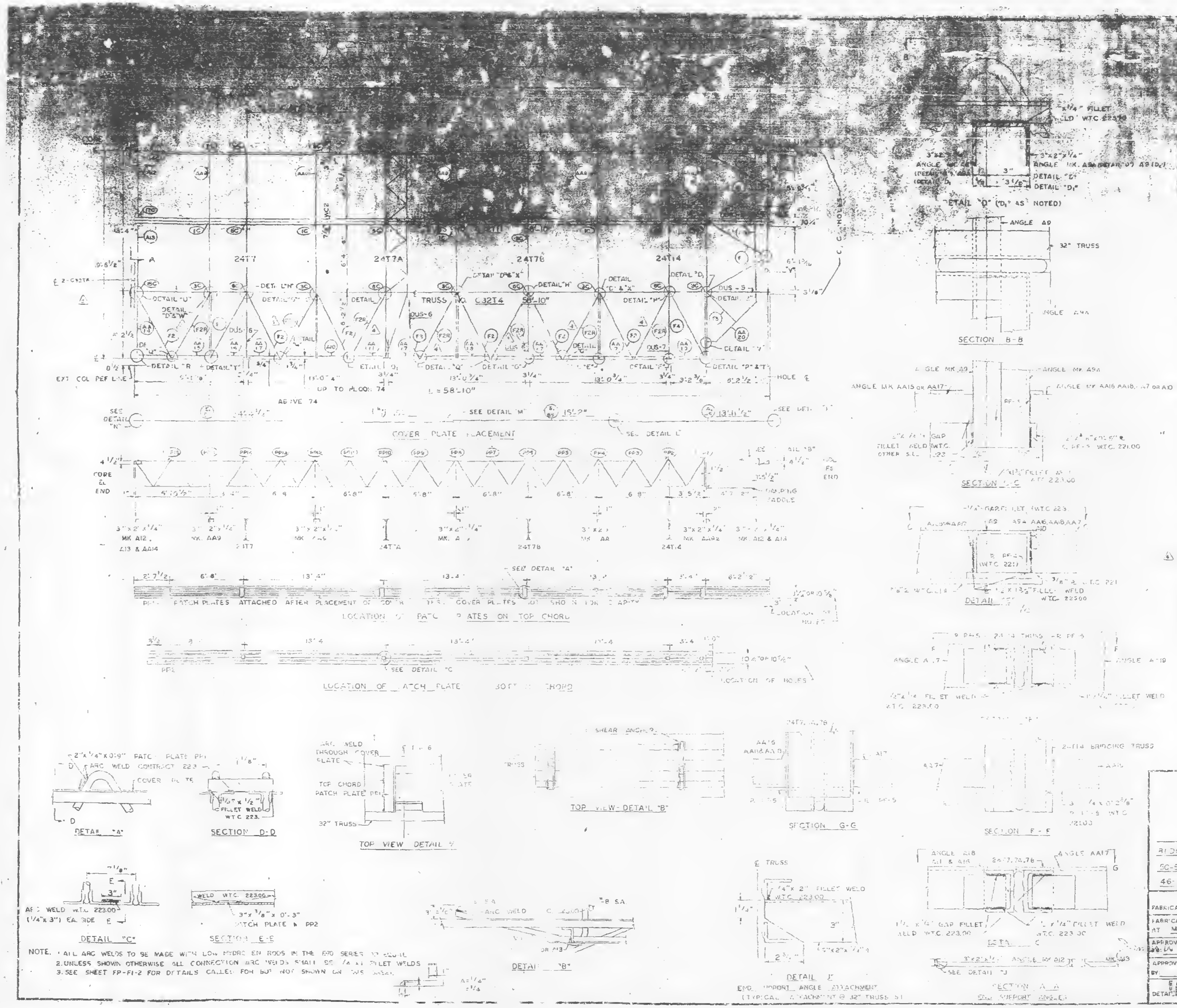
7-AB1-8	5-10-68	SA-124	10-20-67
7-AB1-9	5-10-68	7-AB4-14, 14.1	1-3-68
7-AB1-10	5-10-68	7-AB4-15, 16	5-6-68
7-AB2-2	4-1-68	7-AB4-21	1-3-69
7-AB2-9	4-1-68	7-AB4-23-25	4-1-68
7-AB3-2	1-3-68	7-AB4-29,38.2	4-1-69
7-AB3-13	5-10-68	7-AB4-39-41,43	1-3-68
7-AB4-3, 3.1, 4	1-3-69	7-AB4-42	4-1-69
		7-AB4-45, 47, 47.1	4-1-69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 84-91 (NORTH) PANEL FR1 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-14 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 10/7/68	DRAWN BY: DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV
LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-FR1



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4 x 1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

FLOOR TRUSS				
BRIDGING TRUSSES				
3"x2"x1/4" ANGLES	A10			
	A13	2	3"x2"x1/4"x	
	A12	2		
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST404
	AA8		SEE REF. DRWG.	
	AA9		SEE REF. DRWG.	
	AA11		SEE REF. DRWG.	ST4
	AA14	1	SEE REF. DRWG.	
	AA15	1	SEE REF. DRWG.	
	AA16	1	SEE REF. DRWG.	
	AA17	3	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA1	1	SEE REF. DRWG.	ST404
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST402
	F2 F2R	7 7	1 1/2"x5/8"x6'-0 1/2"	ST402
	F3	1	1 1/2"x5/8"x6'-11 1/4"	ST402
	F4	1	1 1/2"x5/8"x7'-0	ST402
	F5	1	1 1/2"x5/8x4'-4	ST402
PATCH PLATES	PP1		2"x1/4"x0'-9"	ST400
	PP2	8	3"x3/8"x0'-3"	ST400
COVER PLATES	A	1	9"x0.135"x13'-11"	ST303
	B	2	3"x0.135"x13'-2	ST303
	E	1	0.135"x4'-4 2"	303
	A5	1	3 1/2"x0.135"x13'-1 1/2"	303
	B5	2	3 1/2"x0.13"x15-2	ST303
	E5	1	3 1/2"x0.135"x4	ST303
ANGLE CLIPS*	C2	4	2 1/2"x2"x1/4"x	
	C1	12	2"x1 1/2"x1/4"x0'-6	ST40
DAMPING SADDLE	DUS-3	1	3 1/2"x3 1/2"x	ST
	DUS-5	1	3 1/2"x3 1/2"x1/4"x3'-6"	
	DUS-6		3 1/2"x3 1/2"x	ST4
	DUS-7	1	3 1/2"x3 1/2"x	ST
MISC PLATES	PF-1	2	1 1/2x1/2x0'	ST40
	PF-?		5"x3/8"x4	ST
	PF-2		x x x	ST4
#8 SHEAR ANCHOR	SA2	2	#6 REBAR x 0'-9"	ST404
CORNER ANGLE ASSEMBLY	AF0	1	SEE REF DRWG	ST405

*CLIP ANGLE CHANGE BECOMES EFFECTIVE WITH 33RD FLOOR, TOWER "A".

NO	DATE	REVISION	BY
4	3-20-69	AS NOTED*	G.D.
3	10-11-68	F2 & F2R	M.
2	5-30-68	AS NOTED	T.M.C.
1	9-15-68	GENERAL	T.M.C.

REF. DRWG			
7-AB1-8	5-10-68	SA-124	10-20-67
7-AB1-9	5-10-68	7-AB4-4,4	1-3-68
7-AB1-10	5-10-68	7-ABA-15,6	5-5-68
[illegible]	4-1-68	AB4	3-68
7-AB2-4	4-1-68	7-AB4-3,25	4-1-68
7-AB3-2	1-3-68	7-AF4-9,35,2	68
7-AB3-6	5-10-68	7-AB4-39,41,43	1-3-68
7-AB4-3,3,1,4	1-3-68	7-AB4-42	1-1-68

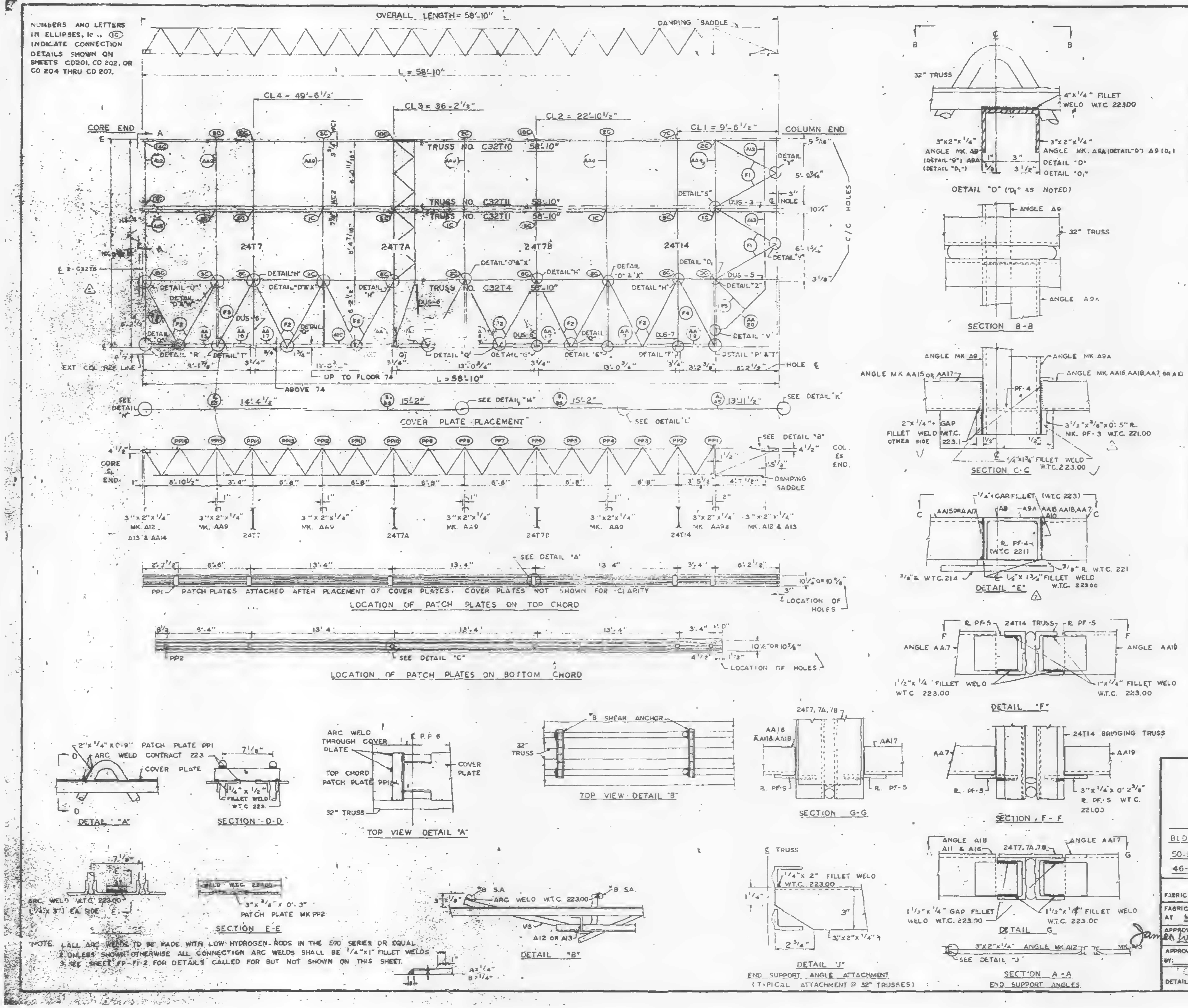
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 50-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 79-91 (SOUTH) PANEL C 19'-9 x 58'
46-58, 64-91 (NORTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB1-12 5-10-68	
APPROVED FOR FABRICATION BY: W. Mile FOR P.O.N.Y.A.	DATE 4/7/69	DRAWN BY: [illegible] DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHUPA DATE JULY 16, 1968	IN CHARGE OF PROD. DEPT.
LACLEDE STEEL CO. DETAILED BY: CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1

NUMBERS AND LETTERS IN ELLIPSES, Ic., (IC) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202, OR CD 204 THRU CD 207.



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	BT207
	T7A	1	24T7A - 19'-6"	BT207A
	T7B	1	24T7B - 19'-6"	BT207B
	T14	1	24T14 - 19'-6"	BT214
3"x2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x 2'-7 5/16"	ST404
	A13	2	3"x2"x1/4"x 6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x 5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST404
	AA9	4	SEE REF. DRWG.	ST404
	AA9₂	1	SEE REF. DRWG.	ST404
	AA11	1	SEE REF. DRWG.	ST404
	AA14	1	SEE REF. DRWG.	ST404
	AA15	1	SEE REF. DRWG.	ST404
	AA16	1	SEE REF. DRWG.	ST404
	AA17	3	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA19	1	SEE REF. DRWG.	ST404
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
	F2	14	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8 x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST400
	PP2	5	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x.0135"x13'-11 1/2"	ST303
	B	2	9"x.0135"x15'-2"	ST303
	E	1	9"x.0135"x14'-4 1/2"	ST303
	AS	1	3 1/2"x.0135"x13'-11 1/2"	ST303
	BS	2	3 1/2"x.0135"x15'-2	ST303
	ES	1	3 1/2"x.0135"x14'-4 1/2	ST303
ANGLE CLIPS	C2	16	2 1/2"x1 1/2"x1/4"x0'-6"	ST400
#8 SHEAR ANCHOR	SA2	2	8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8"x3'-6 7/8"	ST298
	DUS-5	1	3 1/2"x3 1/2"x 3/8"x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-7	.	5"x 3/8"x 4"	ST401
	PF-3	5	3 1/2"x 3/8"x 0'-5"	ST400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF. DRWG	ST405

NO	DATE	REVISION	BY
2	9-30-68	AS NOTED	T.M.C.
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.

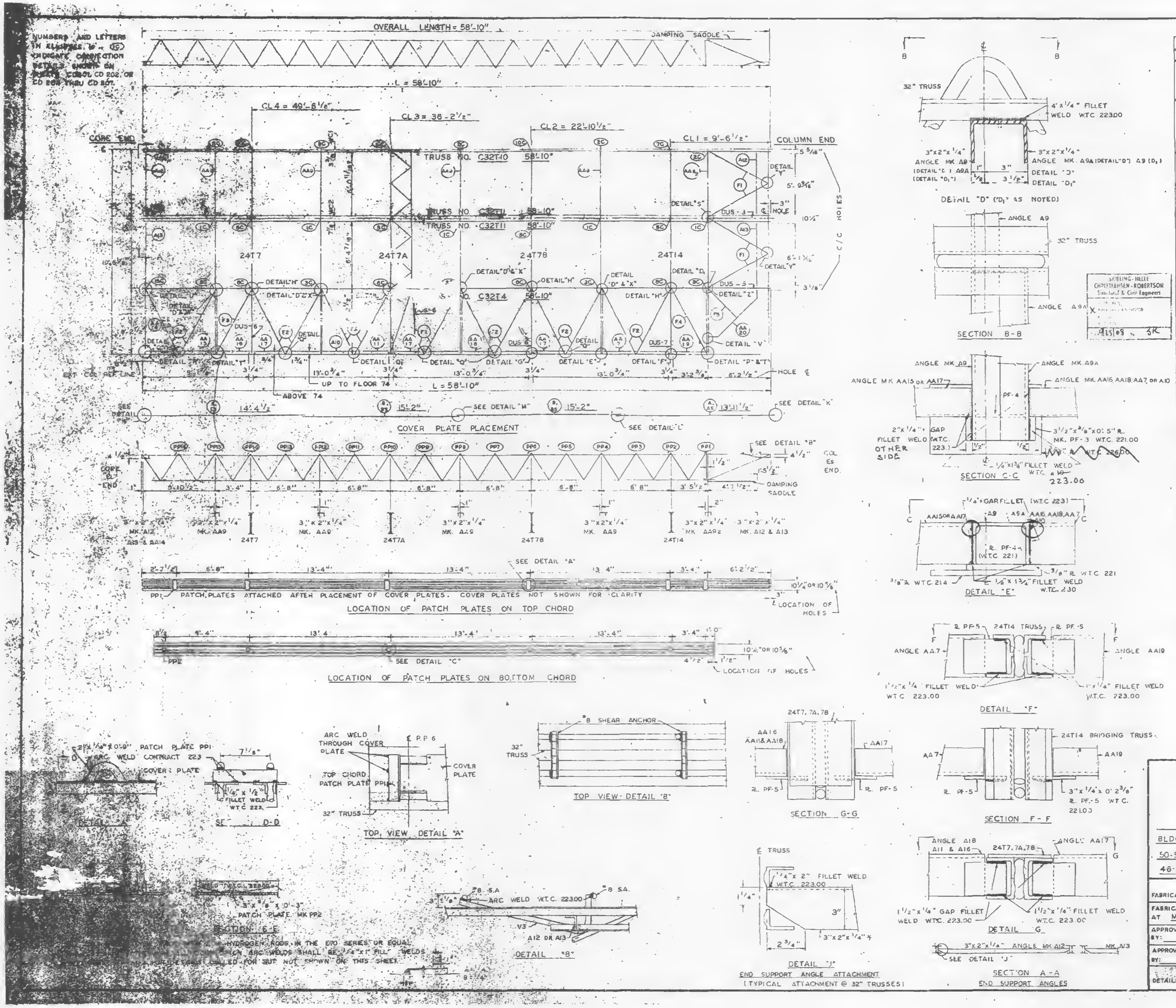
7-AB1-8	5-10-66	SA-124	10-20-67
7-AB1-9	5-10-66	7-AB4-14,14.1	1-3-68
7-AB1-10	5-10-68	7-AB4-15,16	5-6-68
7-AB2-2	4-1-68	7-AB4-21	1-3-68
7-AB2-9	4-1-68	7-AB4-23,25	4-1-68
7-AB3-2	1-3-68	7-AB4-29-38.2	4-1-68
7-AB3-13	5-10-68	7-AB4-39-41, 43	1-3-68
7-AB4-3,3.1,4	1-3-68	7-AB4-42	4-1-68
		7-AB4-45,47,47.1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 79-91 (SOUTH) PANEL F1 19'-6" x 58'-10"
46-58, 84-91 (NORTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-13 5-10-68	PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 10/7/68	DRAWN BY: L.R. DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1



SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
4/15/68 SR

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-8"	ST207
	T7A	1	24T7A - 19'-6"	ST207A
	T78	1	24T78 - 19'-8"	ST207B
	T14	1	24T14 - 19'-8"	ST214
3"x2"x1/4" ANGLES	A10	1	3"x2"x1/4"x2'-7 15/16"	ST404
	A13	2	3"x2"x1/4"x6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST404
	AA9	4	SEE REF. DRWG.	ST404
	AA92	1	SEE REF. DRWG.	ST404
	AA11	1	SEE REF. DRWG.	ST404
	AA14	1	SEE REF. DRWG.	ST404
	AA15	1	SEE REF. DRWG.	ST404
	AA16	1	SEE REF. DRWG.	ST404
	AA17	3	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA19	1	SEE REF. DRWG.	ST404
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST402
	F2	14	1 1/2"x5/8"x6'-10 1/2"	ST402
	F3	1	1 1/2"x5/8"x6'-11 1/4"	ST402
	F4	1	1 1/2"x5/8"x7'-0"	ST402
	F5	1	1 1/2"x5/8 x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x1/4"x0'-9"	ST400
	PP2	6	3"x3/8"x0'-3"	ST400
COVER PLATES	A	1	9"x.0135"x13'-11 1/2"	ST303
	B	2	9"x.0135"x15'-2"	ST303
	E	1	9"x.0135"x14'-4 1/2"	ST303
	As	1	3 1/2"x.0135"x13'-11 1/2"	ST303
	Bs	2	3 1/2"x.0135"x15'-2	ST303
	Es	1	3 1/2"x.0135"x14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2"x1 1/2"x1/4"x0'-6"	ST400
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST298
	DUS-5	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x1/2"x0'-4"	ST400
	PF-2		5"x3/8"x4"	ST401
	PF-3	5	3 1/2"x3/8"x0'-5"	ST400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST405

NO	DATE	REVISION	BY
1	9-19-68	GENERAL	T.M.C.

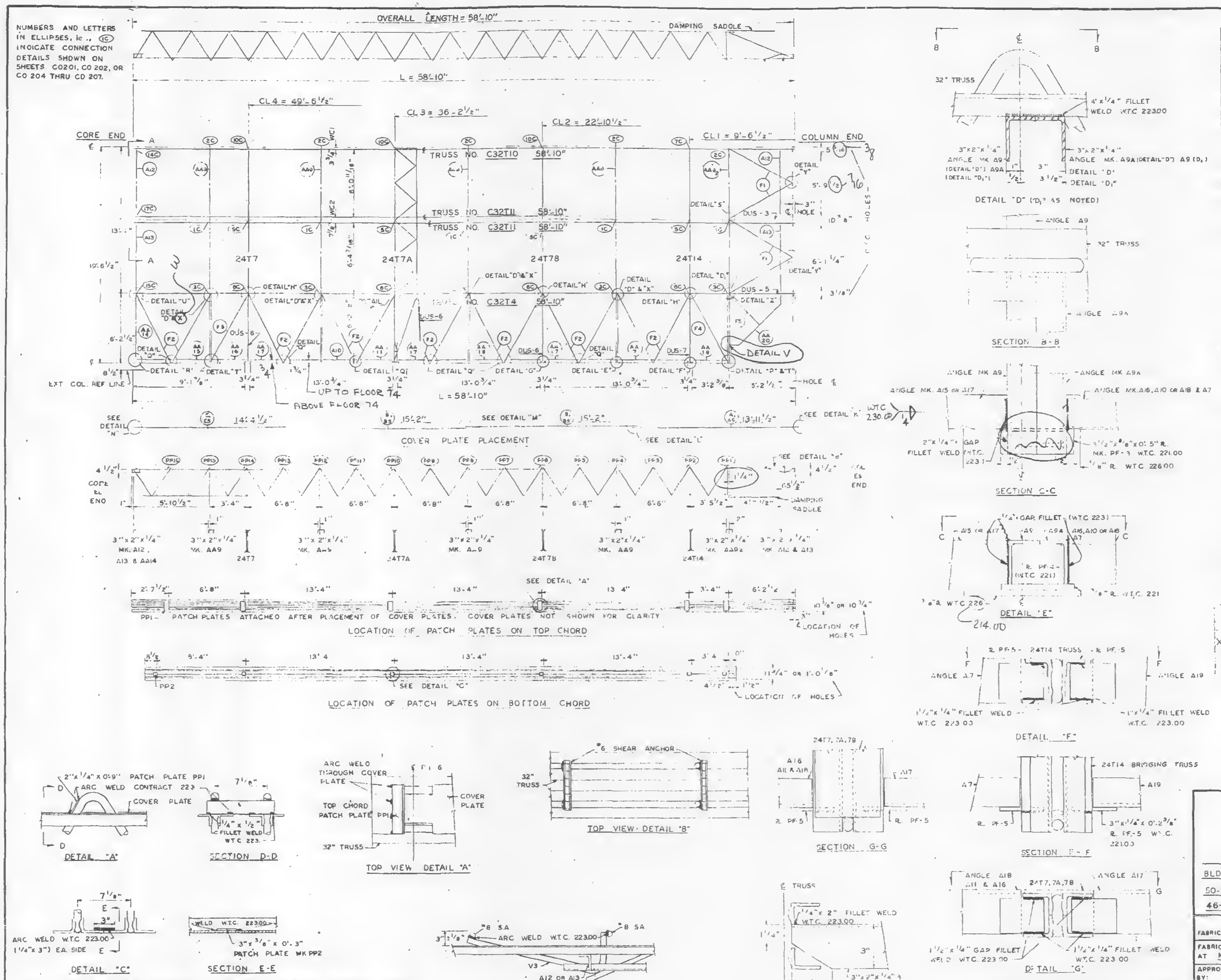
REF. DRWG.		SA-124	10 20-67
7-AB1-8	5-10-68	7-AB4-14, 14.1	1-3-68
7-AB1-9	5-10-68	7-AB4-15, 18	5-6-68
7-AB1-10	5-10-66	7-AB4-21	1-3-68
7-AB2-2	4-1-68	7-AB4-23-25	4-1-68
7-AB2-9	4-1-68	7-AB4-29-38.2	4-1-68
7-AB3-2	1-3-68	7-AB4-39-41, 43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3, 3.1, 4	1-3-68	7-AB4-45, 47, 47.1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 79-91 (SOUTH) PANEL F1 19'-6" x 58'-10"
46-58, 64-91 (NORTH)

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-13 5-10-68
PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE
DRAWN BY:
DATE JULY 15, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA
DATE JULY 16, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F1

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CO201, CO 202, OR CO 204 THRU CD 207.



NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST 210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST 204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	BT 207
	T7A	1	24T7A - 19'-6"	BT207A
	T7B	1	24T7B - 19'-6"	BT207B
	T14	1	24T14 - 19'-6"	BT214
3"x 2"x 1/4" ANGLES	A10	1	3"x 2"x 1/4"x 2'-[illegible] 5/16"	ST404
	A13	2	3"x 2"x 1/4"x 6'-3 7/16"	ST404
	A12	2	3"x 2"x 1/4"x 5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST404
	AA9	4	SEE REF. DRWG.	ST404
	AA9₂	1	SEE REF. DRWG.	ST404
	AA11	1	SEE REF. DRWG.	ST404
	AA14	1	SEE REF. DRWG.	ST404
	AA15	1	SEE REF. DRWG.	ST404
	AA16	1	SEE REF. DRWG	ST404
	AA17	3	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA19	1	SEE REF. DRWG	ST404
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
	F2	14	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8 x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST400
	PP2	5	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9 x 0135"x 13'-11 1/2"	ST303
	B	2	9"x 0135"x 15'-2"	ST303
	E	1	9"x 0135"x 14'-4 1/2"	ST303
	AS	1	3 1/2"x .0135"x 13'-11 1/2"	ST303
	BS	2	3 1/2"x .0135"x 15'-2	ST303
	ES	1	3 1/2"x 0135"x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST400
	PF-3	5	3 1/2"x 3/8"x 0'-[illegible]"	ST400
	PF-4	⑤ 6	3 1/2"x 1/4"x 0'-2 3/4"	ST400
	PF-5	8	3"x 1/4"x 0'-2 3/8"	ST400
	PF-6	② 1	2 1/4"x 1/4"x 0'-4 1/2" 5 1/2	ST401
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF. DRWG	ST405
	PF7	1	3 1/4 x 1/4 x 6	
	PF8	1	3 x 3/8 x 4	

X

9/10/68 SK

REF. DRWG			
		SA-124	10 20-67
7-AB1-9	5 10 68	7-AB4-14,14.1	1-3-68
7-AB1-9	5-10-68	7-AB4-15,18	5-6-68
7-AB1-10	5-10-68	7-AB4-21	1-3-68
7-A92-2	4-4-68	7-AB4-23-25	4-1-68
7-AB2-9	4-1-68	7-AB4-29-38,2	4-1-68
7-AB3-2	1-3-68	7-AB4-39-41,43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3,3.1,4	1-3-68	7-AB4-45,47,47.1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

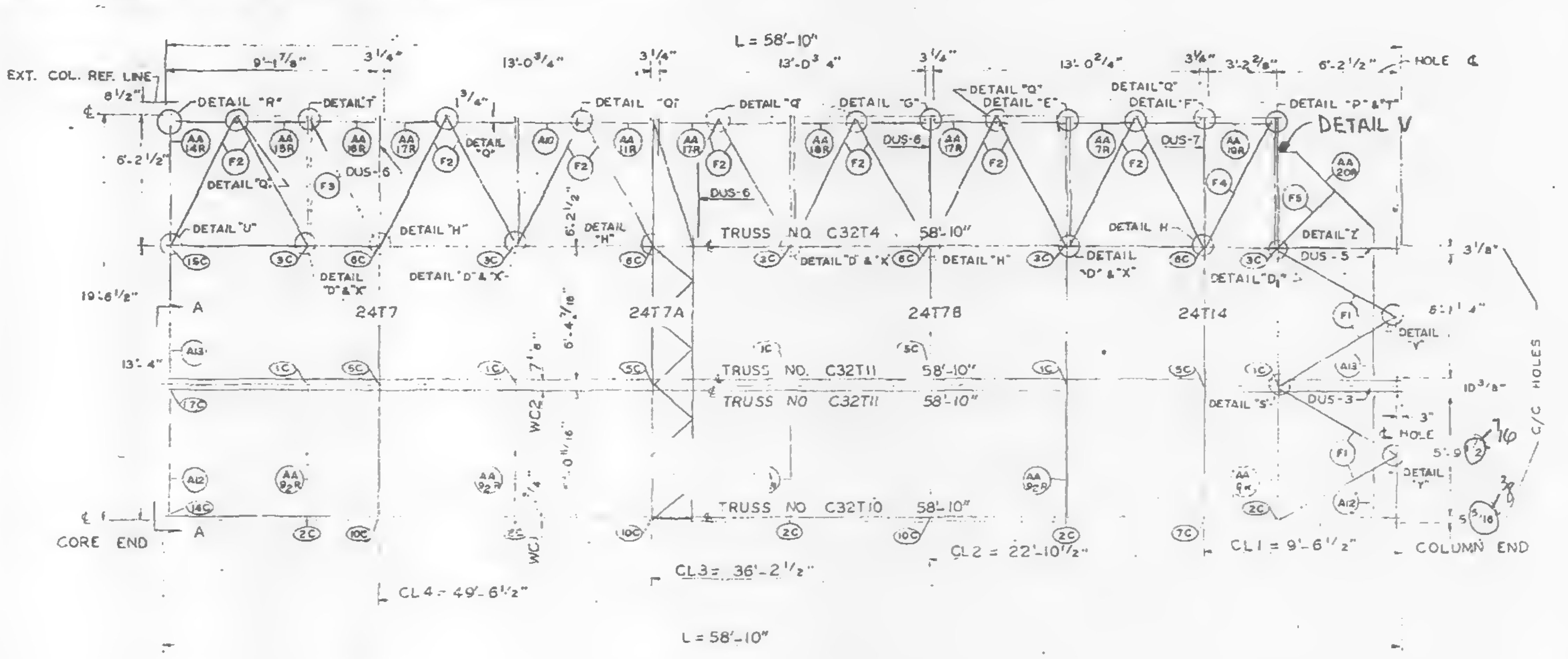
91

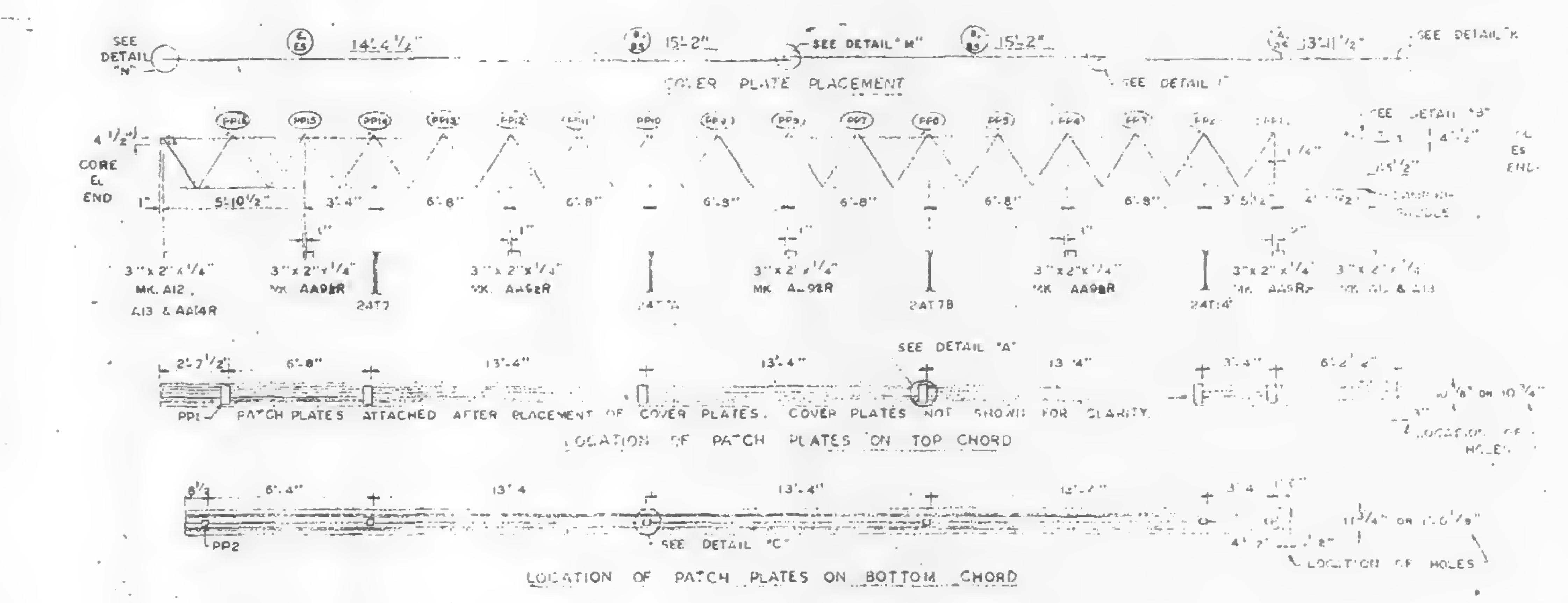
BLDG A FLOORS 10-24 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 79 (81) (SOUTH) PANEL F1 19'-6" x 58'-10"
46-58, 84-91 (NORTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-13 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. — DATE	DRAWN BY: R.R. DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR — DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1

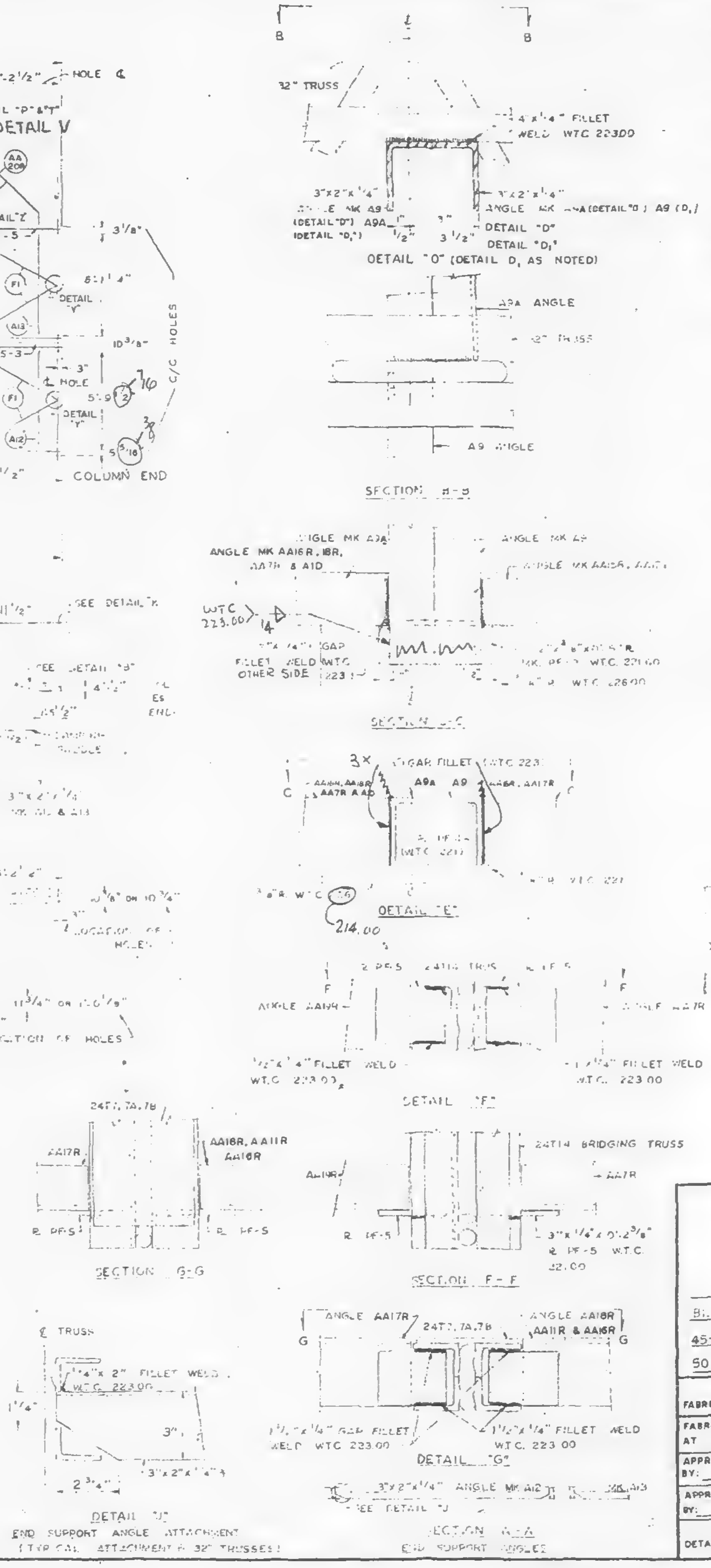
LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1C), SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.





LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD


B
B
32" TRUSS
1/4"x1/4" FILLET WELD WTC 223.00
3"x2"x1/4" ANGLE MK A9 (DETAIL "O")
A9A (DETAIL "D1")
3"x2"x1/4" ANGLE MK A9A (DETAIL "O") A9 (D1)
DETAIL "D"
DETAIL "D1"
A9A ANGLE
32" TRUSS
A9 ANGLE
ANGLE MK AA16R, 18R, AA7R & AA10
ANGLE MK A9A
ANGLE MK A9
ANGLE MK AA9R
WTC 223.00
GAP FILLET WELD WTC OTHER SIDE
WTC 226.00
3x GAP FILLET WTC 223
A9A
A9
WTC 221
WTC 214.00
2 PF-5
24T14 TRUSS
ANGLE AA14R
1/2"x1/4" FILLET WELD W.T.C. 223.00
1 1/4"x1/4" FILLET WELD W.T.C. 223.00
AA16R, AA11R
AA17R
AA18R
PF-5
24T14 BRIDGING TRUSS
AA7R
3"x1/4"x 0'-2 3/8" PF-5 W.T.C. 22.00
ANGLE AA17R
24T7, 7A, 7B
ANGLE AA18R
AA11R & AA16R
G
G
1 1/2"x1/4" GAP FILLET WELD WTC 223.00
1 1/2"x1/4" FILLET WELD W.T.C. 223.00
℄ TRUSS
1/4"x2" FILLET WELD W.T.C. 223.00
3"x2"x1/4"
3"x2"x1/4" ANGLE MK A12
SEE DETAIL "J"

DETAIL "O" (DETAIL D1 AS NOTED)

SECTION B-B

SECTION C-C

DETAIL "E"

DETAIL "F"

SECTION G-G

SECTION F-F

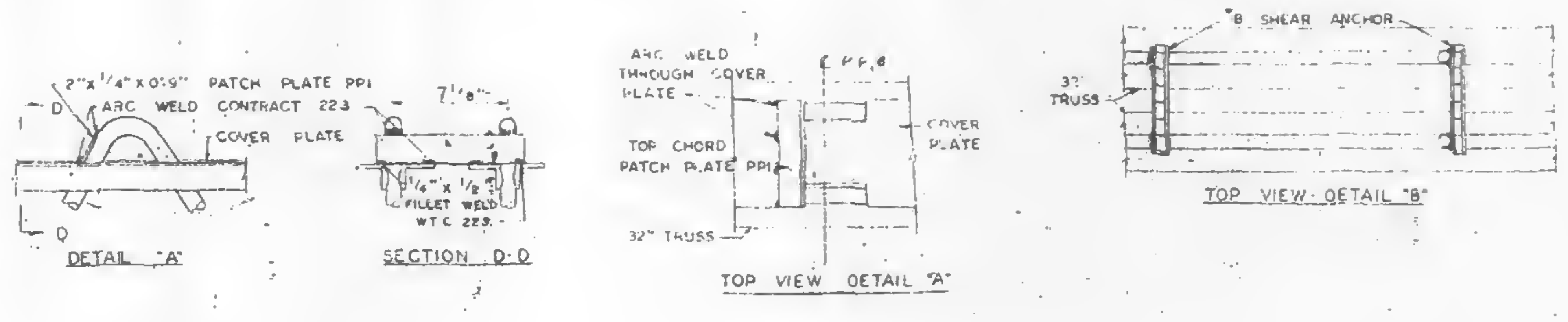
DETAIL "G"

DETAIL "U"

END SUPPORT ANGLE ATTACHMENT (TYPICAL ATTACHMENT @ 32" TRUSSES)

SECTION A-A

END SUPPORT ANGLE

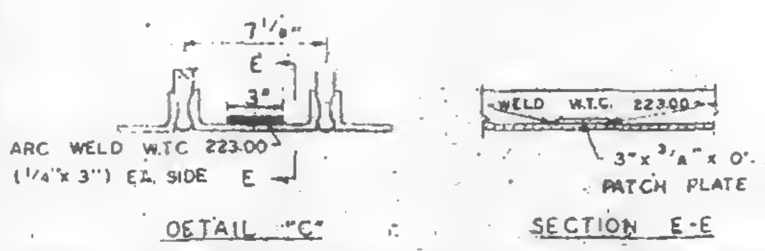

2"x1/4"x0'-9" PATCH PLATE PP1
ARC WELD CONTRACT 223
COVER PLATE
D
D
7 1/8"
1/4"x1/2" FILLET WELD W.T.C. 223
ARC WELD THROUGH COVER PLATE
PP-8
COVER PLATE
TOP CHORD PATCH PLATE PP1
32" TRUSS
#8 SHEAR ANCHOR
32" TRUSS

DETAIL "A"

SECTION D-D

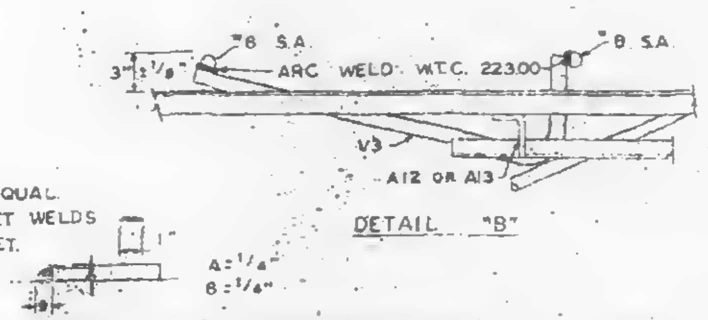
TOP VIEW DETAIL "A"

TOP VIEW-DETAIL "B"



DETAIL "C"

SECTION E-E



DETAIL "B"

NOTE.
1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST 210
	T11	2	C32T11 - 58'-10"	ST211
	TA	1	C32T4 - 58'-10"	ST 204
BRIDGING TRUSSES	T7	1	24T7 - 19'-8"	BT 207
	T7A	1	24T7A - 19'-6"	BT207A
	T7B	1	24T7B - 19'-6"	BT207B
	T14	1	24T14 - 19'-8"	BT 214
3"x2"x1/4" ANGLES	A9		3"x2"x1/4"x2'-5/16"	ST404
	A 3	2	3"x2"x1/4"x6'-3 7/16"	ST404
	A 2	2	3"x2"x1/4"x5'-11 1/16"	ST 404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA2R	4	SEE REF. DRWG	ST406
	AA11R	1	SEE REF. DRWG	ST406
	AA14R	1	SEE REF. DRWG.	ST406
	AA15R	1	SEE REF. DRWG	ST406
	AA16R	1	SEE REF. DRWG	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA19R	1	SEE REF. DRWG	ST406
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST402
	F2	14	1 1/2"x5/8"x6'-10 1/2"	ST402
	F3	1	1 1/2"x5/8"x6'-11 1/4"	ST402
	F4	1	1 1/2"x5/8"x7'-0"	ST402
	F5	1	1 1/2"x5/8"x4'-4"	ST402
PATCH PLATES	PP1	6	2"x1/4"x0'-9"	ST400
	PP2	6	3"x3/8"x0'-3"	ST400
COVER PLATES	A	1	9"x.0135"x13'-11 1/2"	ST303
	B	2	9"x.0135"x15'-2"	ST303
	E	1	9"x.0135"x14'-4 1/2"	ST 303
	AS	1	3 1/2"x.0135"x13'-11 1/2"	ST303
	BS	2	3 1/2"x.0135"x15'-2"	ST303
	ES	1	3 1/2"x.0135"x14'-4 1/2"	ST 303
ANGLE CLIPS	A2	16	2 1/2"x1 1/2"x1/4"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3		3 1/2"x3 1/2"x3/8"x4'-6 7/8"	ST298
	DUS-5	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST299
	DUS-6	1	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x3 1/2"x3/8"x4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x1/2"x0'-4"	ST400
	PF-3	5	3 1/2"x3/8"x0'-[illegible]"	ST400
	PF-4	5	3 1/2"x1/4"x0'-2 3/4"	ST400
	PF-5	6	3"x1/4"x0'-2 3/8"	ST400
	PF-6	2	2 1/4"x1/4"x0'-4 1/2"	ST401
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG	ST405
	PF7	1	2 1/4 x 1/4 x 6	
	PF8	1	3 x 3/8 x 4	

9/10/68 SK

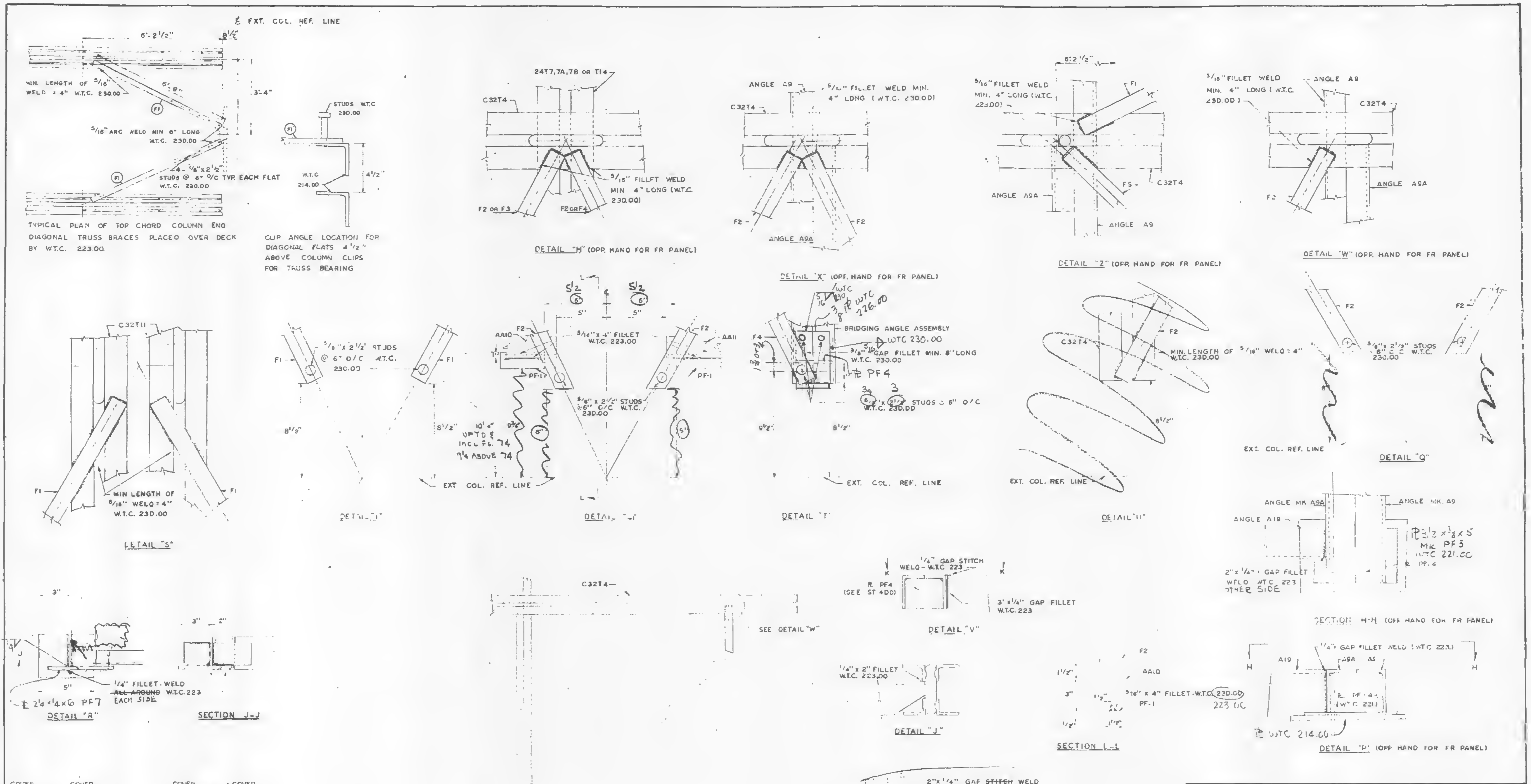
REF DRWGS			
		SA-124	10-20-67
7-A81-9	5-10-68	7-A84-14,14.1	1-3-68
7-A81-9	5-10-68	7-A84-15,16	5-6-68
7-A81-10	5-10-68	7-A84-21	1-3-68
7-A82-2	4-1-68	7-A84-23-25	4-1-68
7-A82-9	4-1-68	7-A84-29,35.2	4-1-68
7-A83-2	1-3-68	7-A84-39-41,A3	1-3-68
7-A83-13	5-10-68	7-A84-42	4-1-68
7-A84-3,3.1,4	1-3-68	7-A84-45,47,47.1	4-1-68

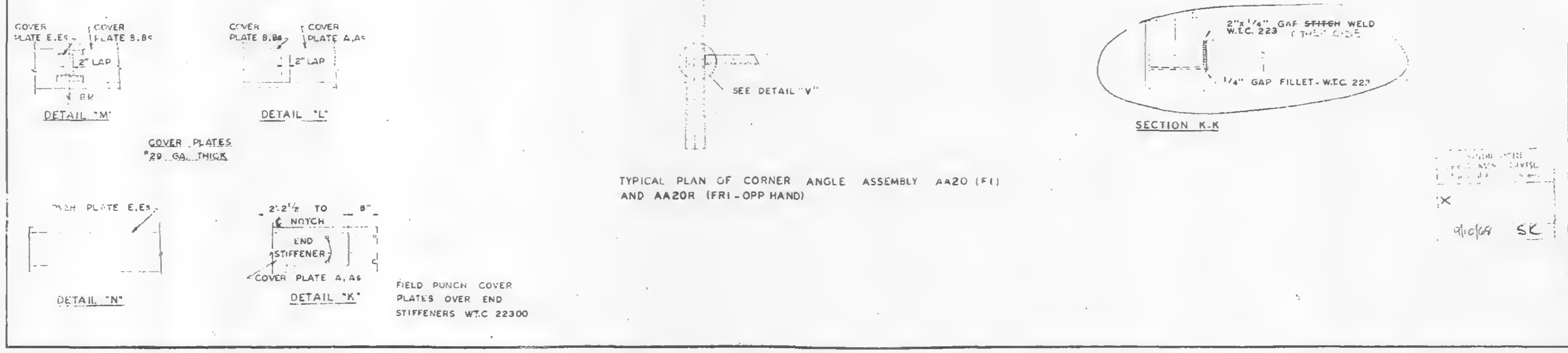
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 84-91 (NORTH) PANEL FR1 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

FABRICATION BY: LACLEOE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-14 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: O.B. DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARE WEBER LACLEDE STEEL CO.		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-FR1


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
5/16" ARC WELD MIN 6" LONG W.T.C. 230.00
4 - 1/8"x2 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
F1
3'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
24T7,7A,7B OR T14
C32T4
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
F2 OR F3
F2 OR F4
DETAIL "H" (OPP. HAND FOR FR PANEL)
ANGLE A9
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
F2
ANGLE A9A
DETAIL "X" (OPP. HAND FOR FR PANEL)
6'-2 1/2"
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
F1
F5
ANGLE A9A
ANGLE A9
DETAIL "Z" (OPP. HAND FOR FR PANEL)
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
ANGLE A9
C32T4
ANGLE A9A
DETAIL "W" (OPP. HAND FOR FR PANEL)
C32T11
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
DETAIL "S"
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
8 1/2"
DETAIL "U"
5 1/2
6"
5"
AA10
AA11
F2
PF-1
5/16" x 4" FILLET W.T.C. 223.00
5/8" x 2 1/2" STUDS 6" O/C W.T.C. 230.00
10' 4" UPTO & Incl. FL. 74
9 1/4 ABOVE 74
8"
5 1/2
EXT. COL. REF. LINE
DETAIL "T"
5/16 W.T.C. 230
3/8 ℞ W.T.C. 226.00
BRIDGING ANGLE ASSEMBLY
W.T.C. 230.00
3/8" GAP FILLET MIN. 8" LONG W.T.C. 230.00
℞ PF4
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
F4
EXT. COL. REF. LINE
DETAIL "T"
C32T4
F2
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
8 1/2"
EXT. COL. REF. LINE
DETAIL "U"
F2
5/8" x 2 1/2" STUDS 6" O/C W.T.C. 230.00
EXT. COL. REF. LINE
DETAIL "Q"
ANGLE MK A9A
ANGLE MK A9
ANGLE A19
℞ 3 1/2 x 3/8 x 5 MK PF3 W.T.C. 221.00
℞ PF 4
2" x 1/4" GAP FILLET WELD W.T.C. 223 OTHER SIDE
SECTION "H-H" (OPP HAND FOR FR PANEL)
3"
5"
1/4" FILLET WELD ~~ALL AROUND~~ EACH SIDE W.T.C. 223
℞ 2 1/4 x 1/4 x 6 PF7
DETAIL "R"
3"
2"
SECTION J-J
C32T4
SEE DETAIL "W"
1/4" GAP STITCH WELD - W.T.C. 223
℞ PF4 (SEE ST 4DD)
3" x 1/4" GAP FILLET W.T.C. 223
DETAIL "V"
1/4" x 2" FILLET W.T.C. 223.00
DETAIL "J"
F2
AA10
5/16" x 4" FILLET W.T.C. 230.00 223.00
PF-1
SECTION L-L
1/4" GAP FILLET WELD (W.T.C. 223)
A19
A9A
A9
℞ PF 4 (W.T.C. 221)
℞ W.T.C. 214.00
DETAIL "P" (OPP. HAND FOR FR PANEL)

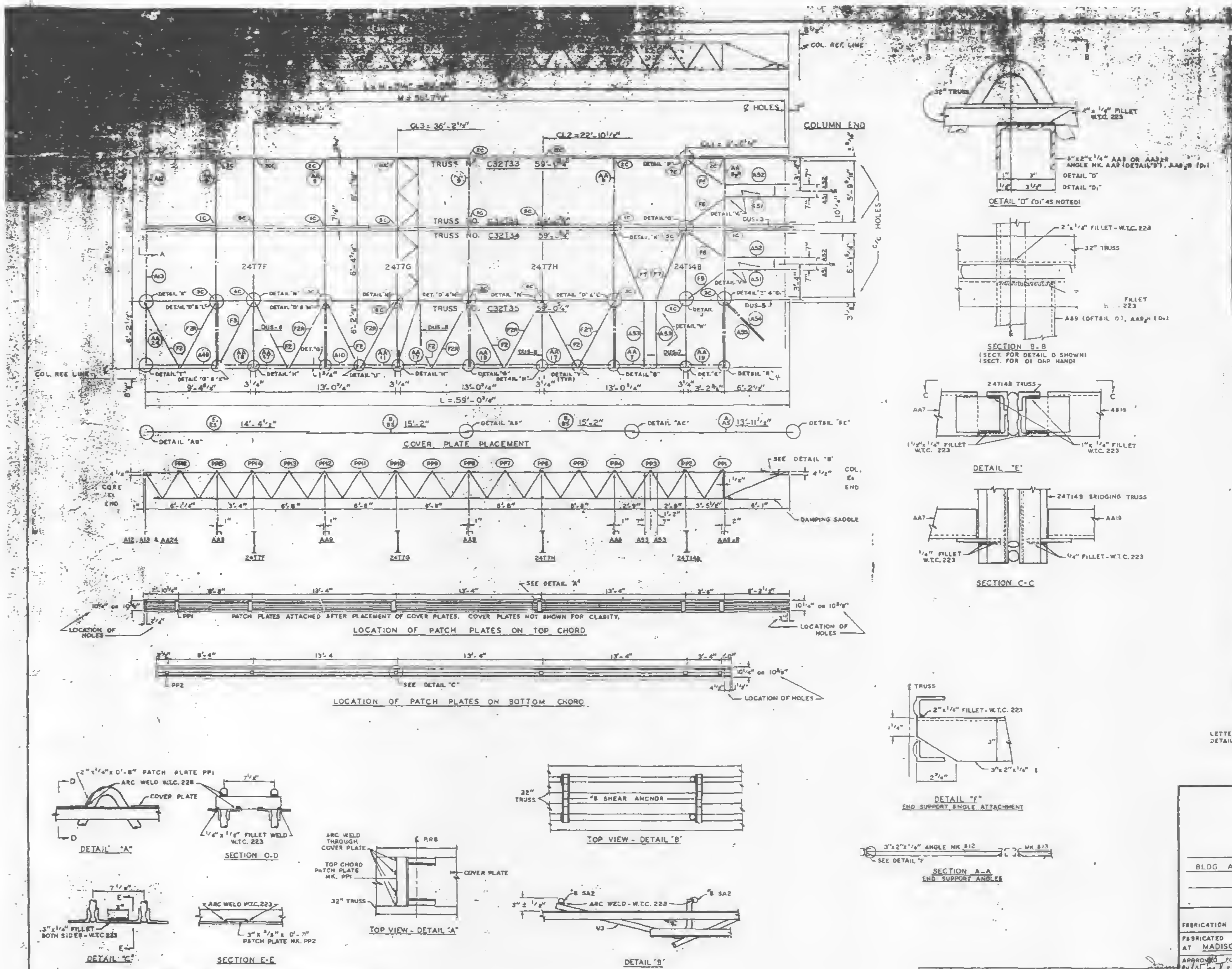

COVER PLATE E, E5
COVER PLATE B, B5
2" LAP
DETAIL "M"
COVER PLATE B, B5
COVER PLATE A, A5
2" LAP
DETAIL "L"
COVER PLATES #20 GA. THICK
FINISH PLATE E, E5
DETAIL "N"
2'-2 1/2 TO ℄ NOTCH
8"
END STIFFENER
COVER PLATE A, A5
DETAIL "K"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 22300
C32T4
SEE DETAIL "V"
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR1 - OPP HAND)
2" x 1/4" GAP ~~STITCH~~ WELD W.T.C. 223 OTHER SIDE
1/4" GAP FILLET - W.T.C. 223
SECTION K-K
9/10/68 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 493-13 5-10-68	PLATE
APPROVED FOR FABRICATION BY: ______ FOR P.O.N.Y.A.	DATE	DRAWN BY: DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JULY 16 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP - F1-2



3"x2"x¼" ANGLES	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	A52	[illegible]	[illegible]	[illegible]
	A53	2	[illegible]	[illegible]
	A54	1	3"x2[illegible]	[illegible]
	A55	1	3"x2"x¼"x4'-[illegible]	ST 4[illegible]
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST 404
	AA8	4	SEE REF. DRWG.	ST 404
	AA8R	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	8	1½"x⅝"x 6'-10⅞"	ST 402
	F2R	6	1½"x⅝"x 6'-10⅞"	ST 402
	F3	1	1½"x⅝"x 3'-11¼"	ST 402
	F8	3	1½"x⅝"x 4'-2¾"	ST 415
	F7	2	1½"x⅝"x 7'-0"	ST 415
	F9	1	1½"x⅝"x 4'-8½"	ST 818
PATCH PLATES	PP1	6	2"x¼"x 0'-9"	ST 400
	PP2	6	3"x⅜"x 0'-3"	ST 400
COVER PLATES	A	1	3"x .0135"x 13'-11½"	ST 303
	B	2	3"x .0135"x 15'-2"	ST 303
	E	1	3"x .0135"x 14'-4½"	ST 303
	As	1	3½"x .0135"x 13'-11½"	ST 303
	Bs	2	3½"x .0135"x 15'-2"	ST 303
	Es	1	3½"x .0135"x 14'-4½"	ST 303
ANGLE CLIPS	C1	8	2"x1½"x¼"x0'-8"	ST 400
	C2	7	2½"x1½"x¼"x0'-8"	ST 400
	C3	1	3"x2"x.37"x 0'-3"	ST 418
DAMPING SADDLE	DUS-3	1	3½"x3½"x⅜"x3'-[illegible]	ST 288
	DUS-5	1	3½"x3½"x⅜"x3'-[illegible]	ST 299
	DUS-6	3	3½"x3½"x⅜"x4'-[illegible]	ST 299
	DUS-7	1	3½"x3½"x⅜"x4'-4[illegible]	ST 299
MISC. PLATES	PF-1	2	1½"x½"x 0'-4"	ST 400
	PF-3	5	3½"x⅜"x 0'-5"	ST 400
	PF-12	2	8½"x½"x1'-0"	ST 418
	PF-13	2	1"x¼"x1'-0"	ST 418
	PF-14	2	3"x¼"x0'-7"	ST 418
	PF-15	2	1½"x½"x 0'-2"	ST 418
	PF-16	2	8¼"x½"x 0'-2"	ST 416
	PF-17	2	2"x¼"x3½"	ST 418
	PF-18	3	2"x¼"x1'-1⅞"	ST 418
#8 SHEAR ANCHOR	SA2	2	#8 REBAR x 0'-8"	ST 400

LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 229, ie. (1C)

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-F8-2 OR FP-F8-3 FOR DETAILS CALLED BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FILLET.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.
A = ¼"
B = ¼"

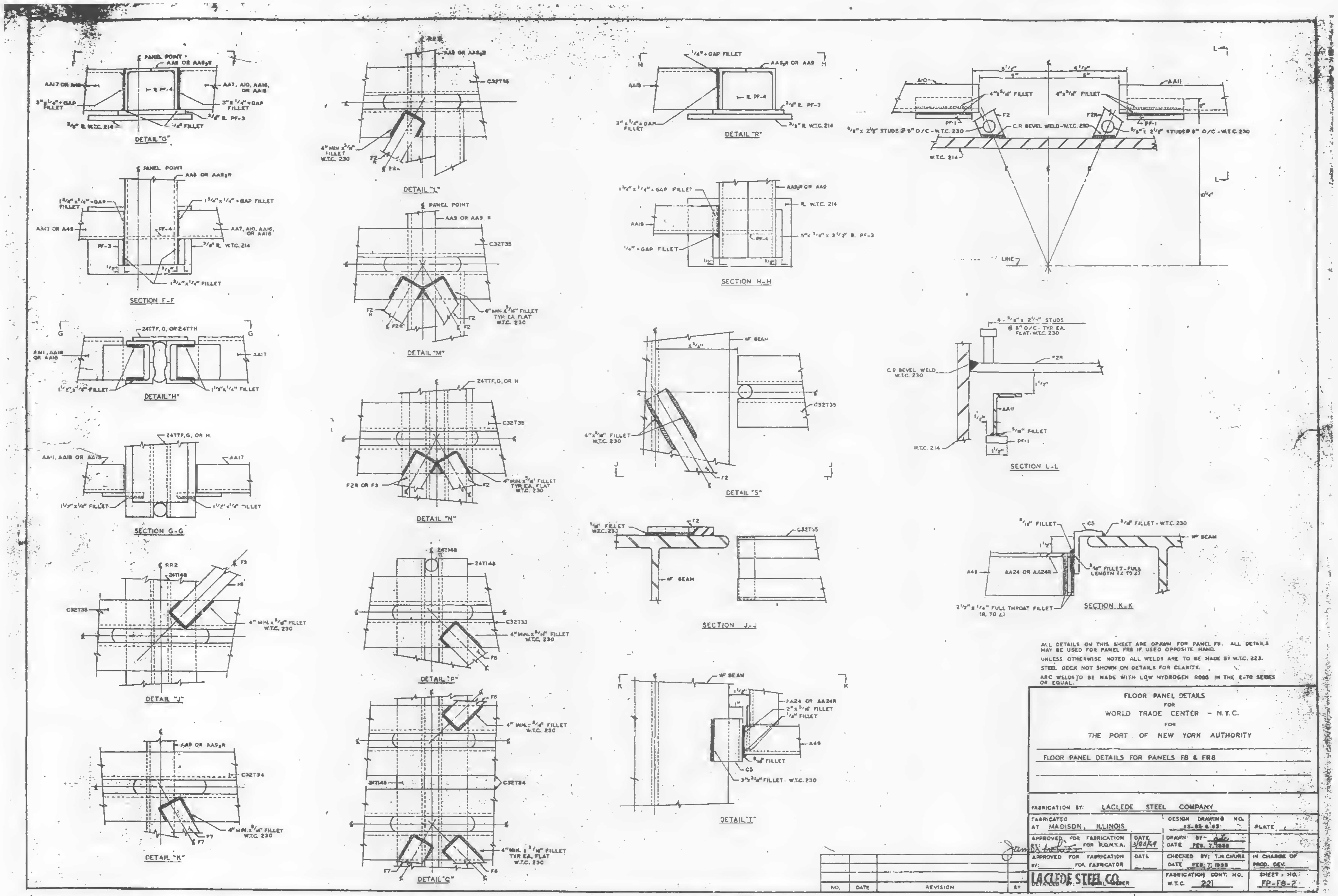
NO.	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH)
PANEL F8 19'-6" x 59'-0¾"

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-42	PLATE 1
APPROVED FOR FABRICATION BY W. White FOR P.O.N.Y.A.	DATE 3/24/69	DRAWN BY: gdc DATE FEB. 7, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE FEB. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F8



ALL DETAILS ON THIS SHEET ARE DRAWN FOR PANEL F8. ALL DETAILS MAY BE USED FOR PANEL FR8 IF USED OPPOSITE HAND.

UNLESS OTHERWISE NOTED ALL WELDS ARE TO BE MADE BY W.T.C. 223.

STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

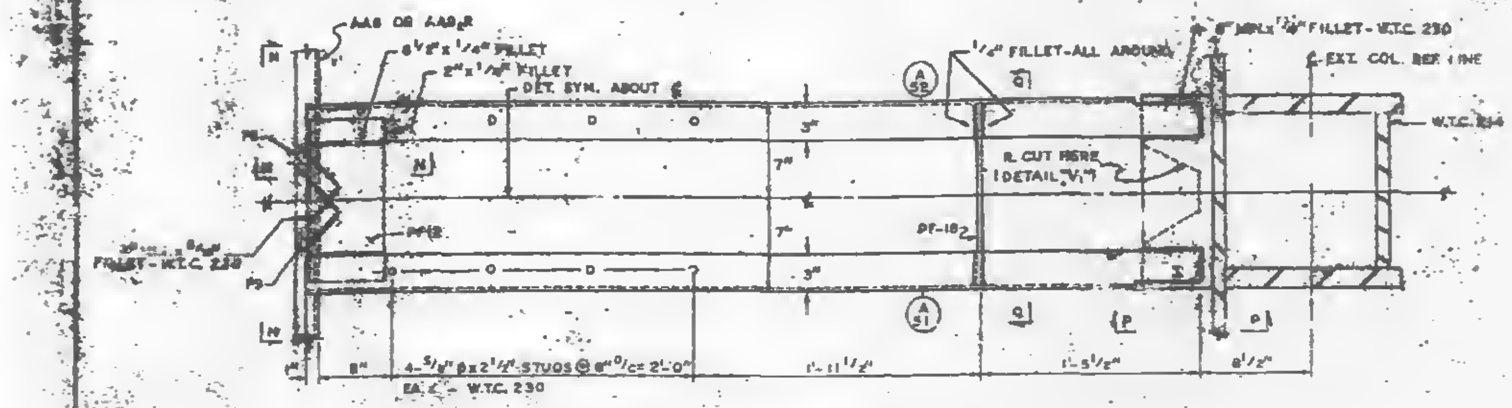
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS F8 & FR8

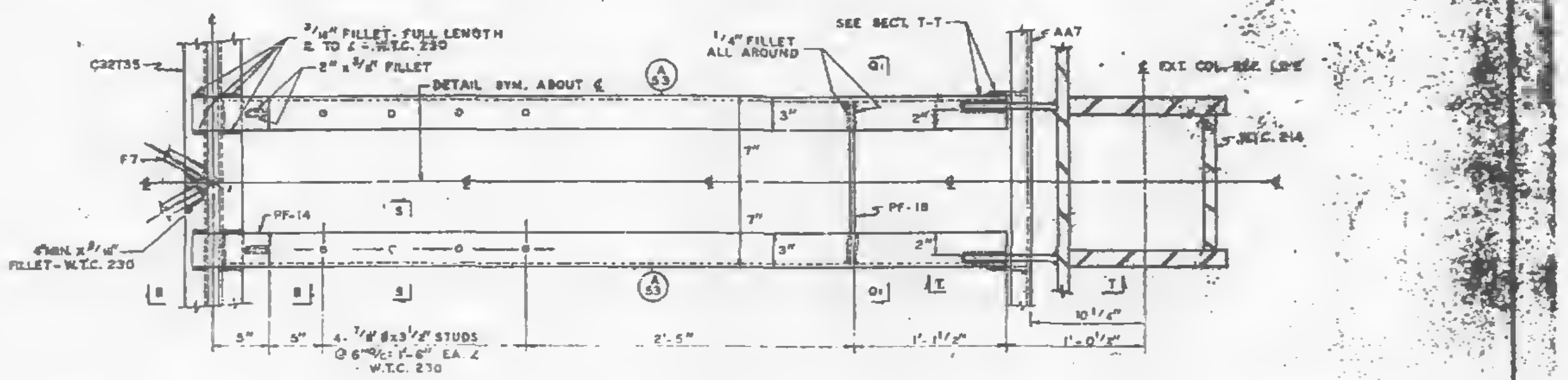
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 35-82 6-45	PLATE
APPROVED FOR FABRICATION BY: James [illegible] FOR P.O.N.Y.A.	DATE 3/24/69	DRAWN BY: [illegible] DATE FEB. 7, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.N.CHURA DATE FEB. 7, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: [illegible] WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F8-2

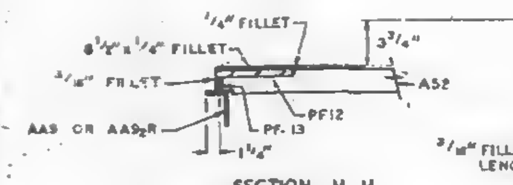
NO.	DATE	REVISION	BY



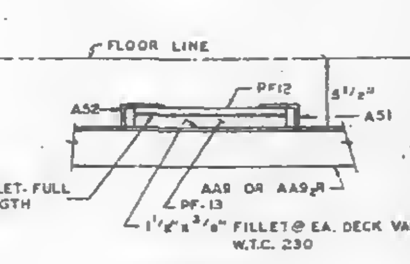
DETAIL "V" (OPP. HAND FOR FR8)
(DETAIL "V₁" AS NOTED)



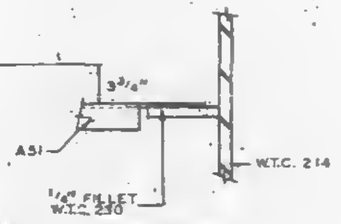
DETAIL "W"



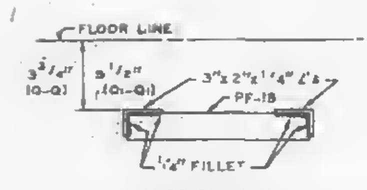
SECTION M-M



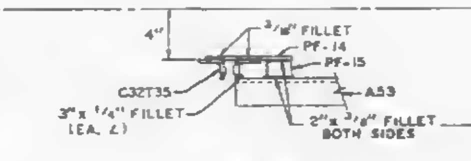
SECTION N-N



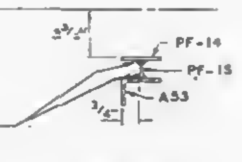
SECTION P-P



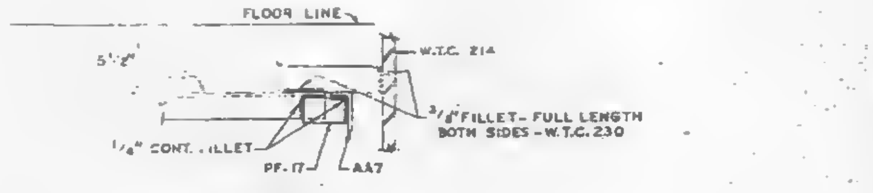
SECTION Q-Q
(SECTION Q₁-Q₁ AS NOTED)



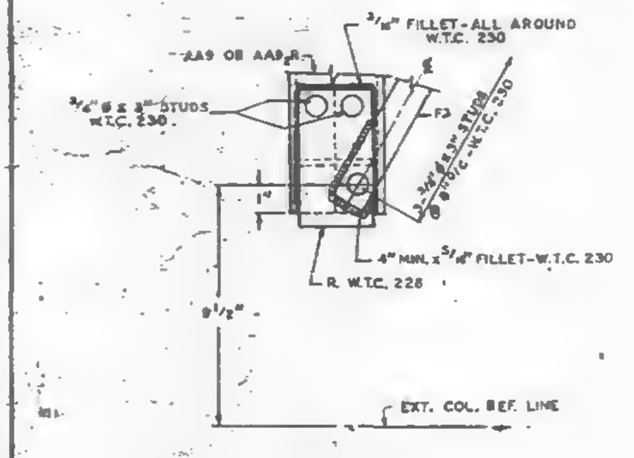
SECTION R-R



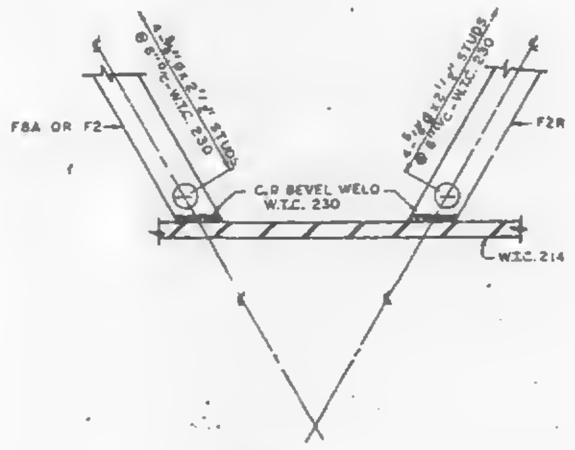
SECTION S-S



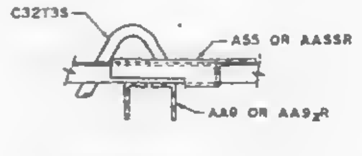
SECTION T-T


AA8 OR AA8₂R
³/₁₆" FILLET-ALL AROUND W.T.C. 230
³/₄"⌀ x 3" STUDS W.T.C. 230
F3
4" MIN. x ³/₁₆" FILLET-W.T.C. 230
R. W.T.C. 228
9¹/₂"
EXT. COL. REF. LINE

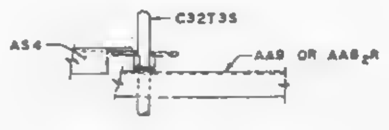
DETAIL "X"
(OPP HAND FOR FR8)



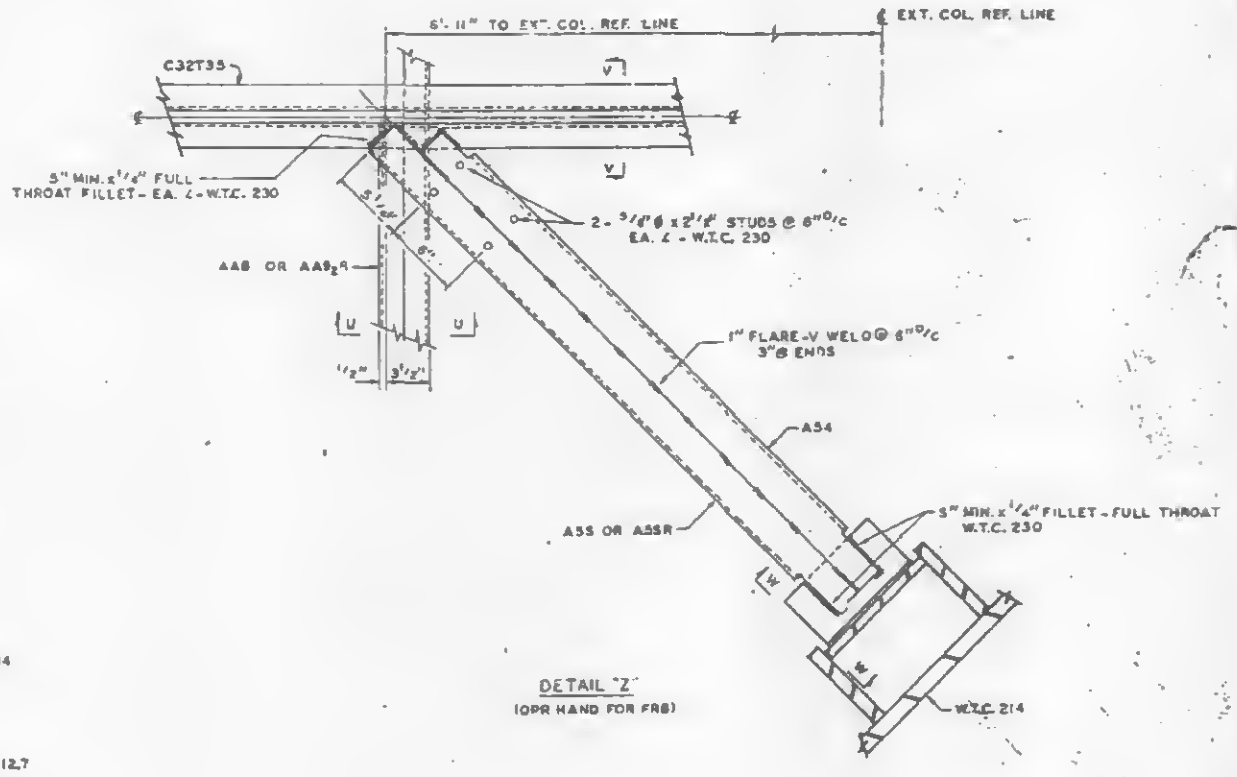
DETAIL "Y"
(OPP. HAND FOR FR8)



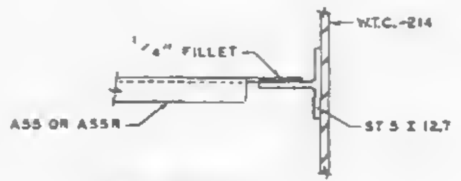
SECTION U-U



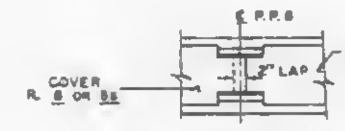
SECTION V-V


6'-11" TO EXT. COL. REF. LINE
EXT. COL. REF. LINE
C32T35
3" MIN. x ¹/₄" FULL THROAT FILLET - EA. ∠ - W.T.C. 230
2-⁵/₈"⌀ x 2¹/₄" STUDS @ 8"o/c EA. ∠ - W.T.C. 230
AA8 OR AA8₂R
1" FLARE-V WELD @ 6"o/c 3"⌀ ENDS
A54
A55 OR A55R
5" MIN. x ¹/₄" FILLET-FULL THROAT W.T.C. 230
W.T.C. 214

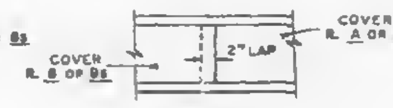
DETAIL "Z"
(OPP HAND FOR FR8)



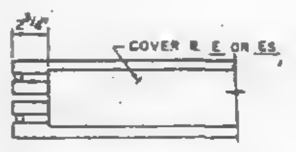
SECTION W-W



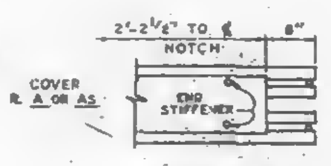
DETAIL "A_B"



DETAIL "A_C"



DETAIL "A_D"



DETAIL "A_E"

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS OTHERWISE NOTED ALL ARC WELDS BY W.T.C. 223.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

REF. DRWG.

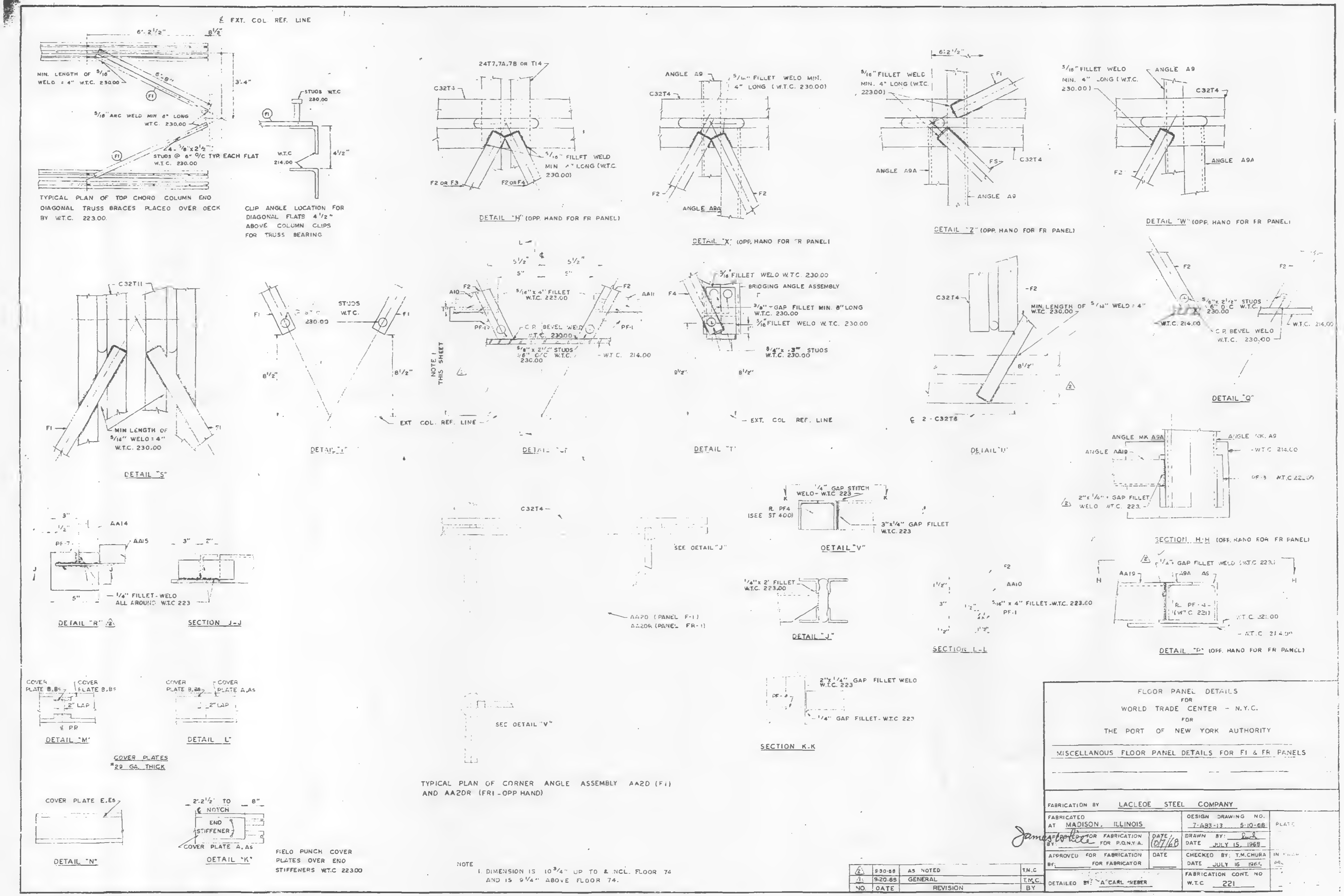
7-A83-82	1-20-69	7-A84-45.1	11-25-58
7-A83-83	1-20-69	7-A84-21	1-8-69
SA-124	1-6-69	7-A84-22	1-6-69
7-A81-20	1-8-69	7-A84-22.1	7-22-69
7-A81-21	1-8-69	7-A84-23	7-22-69
7-A81-40	1-8-69	7-A84-24	10-13-69
7-A82-16	1-8-69	7-A84-26	7-22-69
7-A82-8	1-9-68		
7-A84-31.1	1-20-69		
7-A84-34.1	1-20-69		
7-A84-38.1	1-20-69		

NO.	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS F8 & FR8.

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-82 & 83
PLATE
APPROVED FOR FABRICATION BY: James [illegible] FOR P.O.N.Y.A. DATE 3/24/69
DRAWN BY: [illegible] DATE FEB. 7, 1969
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE FEB. 7, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY: G. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F8-3


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
3'-4"
6'-8"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
F1
5/16" ARC WELD MIN 6" LONG W.T.C. 230.00
4 - 3/8" x 2 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.
STUDS W.T.C 230.00
W.T.C 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
24T7,7A,7B OR T14
C32T4
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
F2 OR F3
F2 OR F4
DETAIL "H" (OPP. HAND FOR FR PANEL)
ANGLE A9
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
F2
ANGLE A9A
DETAIL "X" (OPP. HAND FOR FR PANEL)
6'-2 1/2"
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 223.00)
F1
F5
ANGLE A9A
ANGLE A9
DETAIL "Z" (OPP. HAND FOR FR PANEL)
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
ANGLE A9
C32T4
ANGLE A9A
F2
DETAIL "W" (OPP. HAND FOR FR PANEL)
C32T11
F1
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
DETAIL "S"
STUDS W.T.C.
230.00
8 1/2"
EXT. COL. REF. LINE
DETAIL "I"
NOTE 1 THIS SHEET
L
℄
5 1/2"
5"
A10
F2
AA11
5/16" x 4" FILLET W.T.C. 223.00
PF-1
C.P. BEVEL WELD W.T.C. 230.00
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
- W.T.C. 214.00
DETAIL "L"
F4
5/16" FILLET WELD W.T.C. 230.00
BRIDGING ANGLE ASSEMBLY
3/8" GAP FILLET MIN. 8" LONG W.T.C. 230.00
5/16" FILLET WELD W.T.C. 230.00
3/4" x 3" STUDS W.T.C. 230.00
8 1/2"
EXT. COL. REF. LINE
DETAIL "T"
C32T4
F2
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
8 1/2"
℄ 2 - C32T6
DETAIL "U"
F2
5/8" x 2 1/2" STUDS 6" O.C. W.T.C. 230.00
W.T.C. 214.00
C.P. BEVEL WELD W.T.C. 230.00
DETAIL "Q"
ANGLE MK A9A
ANGLE AA19
ANGLE MK. A9
- W.T.C 214.00
PF-3 W.T.C 221.00
2" x 1/4" GAP FILLET WELD W.T.C. 223.
SECTION H-H (OPP. HAND FOR FR PANEL)
3"
1/2"
AA14
PF-7
AA15
J
5"
1/4" FILLET-WELD ALL AROUND W.T.C 223
DETAIL "R"
3"
2"
SECTION J-J
C32T4
SEE DETAIL "J"
AA20 (PANEL F-1)
AA20R (PANEL FR-1)
K
1/4" GAP STITCH WELD - W.T.C 223
R. PF4 (SEE ST 400)
3" x 1/4" GAP FILLET W.T.C. 223
DETAIL "V"
1/4" x 2" FILLET W.T.C. 223.00
DETAIL "J"
F2
AA10
1 1/2"
3"
5/16" x 4" FILLET-W.T.C. 223.00
PF-1
SECTION L-L
H
AA19
1/4" GAP FILLET WELD (W.T.C 223)
A9A
A5
R. PF-4 (W.T.C. 221)
W.T.C. 221.00
W.T.C. 214.00
DETAIL "P" (OPP. HAND FOR FR PANEL)
COVER PLATE B,BS
COVER PLATE B,BS
2" LAP
℄ PP
DETAIL "M"
COVER PLATE B,BS
COVER PLATE A,AS
2" LAP
DETAIL "L"
COVER PLATES #29 GA. THICK
SEE DETAIL "V"
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR1 - OPP HAND)
PF-4
2" x 1/4" GAP FILLET WELD W.T.C. 223
1/4" GAP FILLET - W.T.C 223
SECTION K-K
COVER PLATE E,ES
DETAIL "N"
2'-2 1/2" TO 8"
℄ NOTCH
END STIFFENER
COVER PLATE A,AS
DETAIL "K"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00
2

NOTE
1. DIMENSION IS 10 3/4" UP TO & INCL. FLOOR 74 AND IS 9 1/4" ABOVE FLOOR 74.

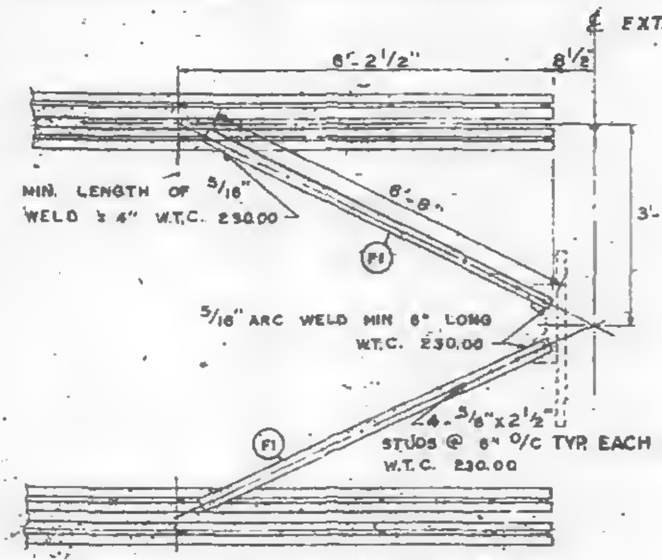
NO.	DATE	REVISION	BY
2	9-30-68	AS NOTED	T.M.C.
1	9-20-68	GENERAL	T.M.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

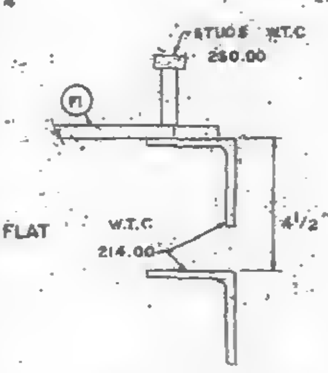
MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

FABRICATION BY LACLEDE STEEL COMPANY	
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-13 5-10-68
APPROVED FOR FABRICATION BY: James Ioffite FOR P.O.N.Y.A. DATE 10/7/68	DRAWN BY: DATE JULY 15, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE	CHECKED BY: T.M.CHURA DATE JULY 16 1968
DETAILED BY: A. CARL WEBER	FABRICATION CONT. NO W.T.C 221

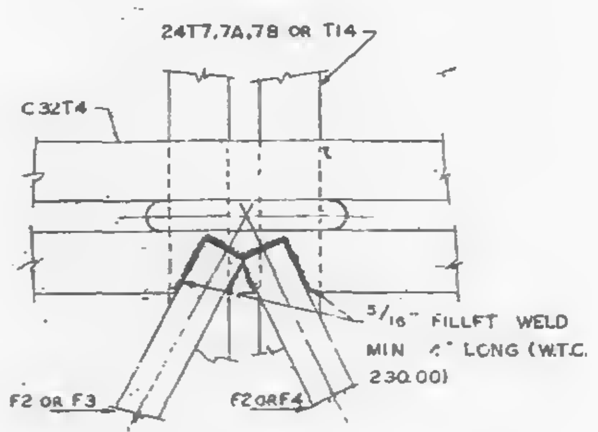
PLATE


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
3'-4"
6'-8"
MIN. LENGTH OF 5/16" WELD ≥ 4" W.T.C. 230.00
F1
5/16" ARC WELD MIN 6" LONG W.T.C. 230.00
4 - 5/8" x 2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230.00
F1

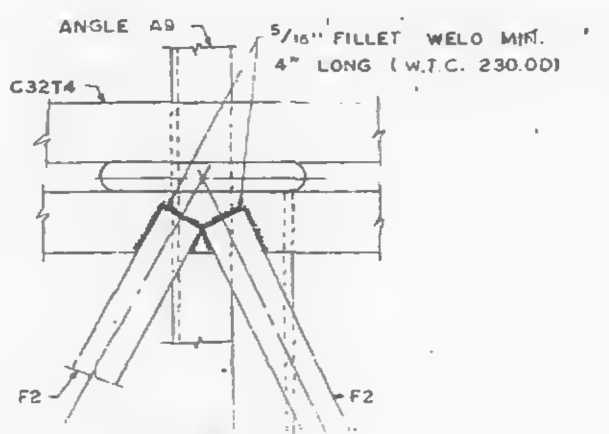
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



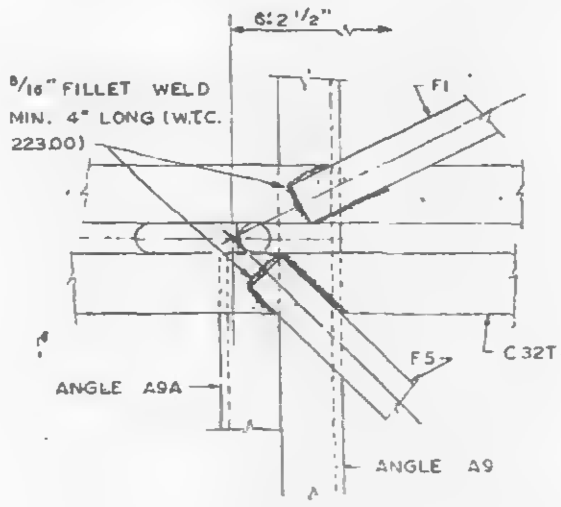
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



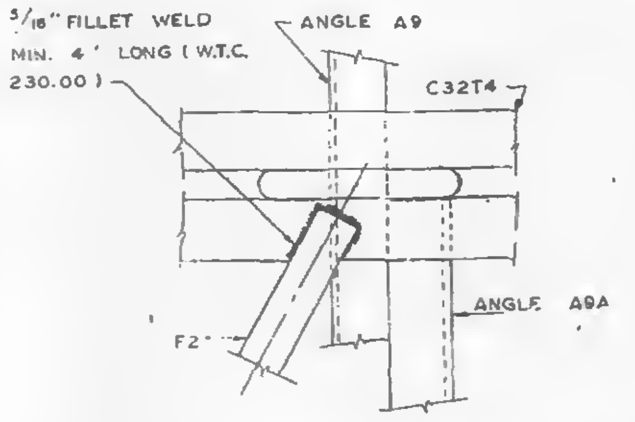
DETAIL "H" (OPP. HAND FOR FR PANEL)



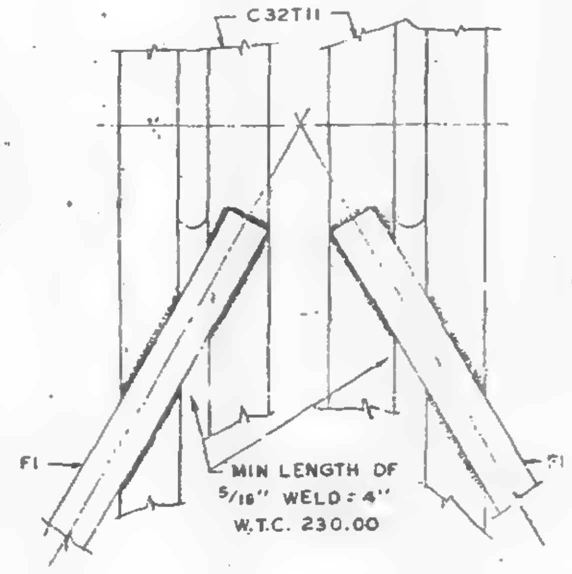
DETAIL "X" (OPP. HAND FOR FR PANEL)



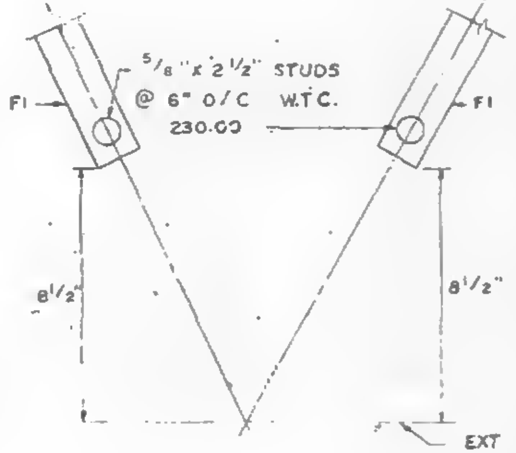
DETAIL "Z" (OPP. HAND FOR FR PANEL)



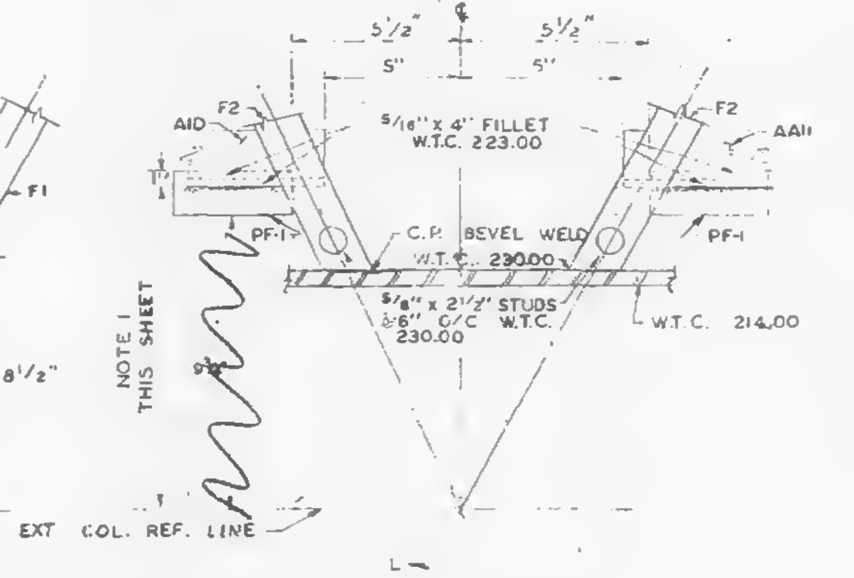
DETAIL "W" (OPP. HAND FOR FR PANEL)



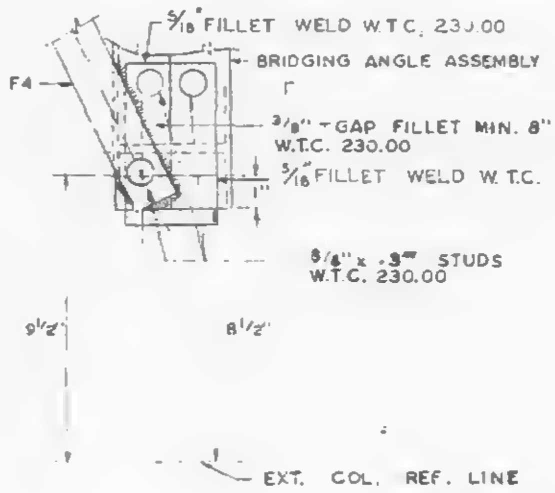
DETAIL "S"



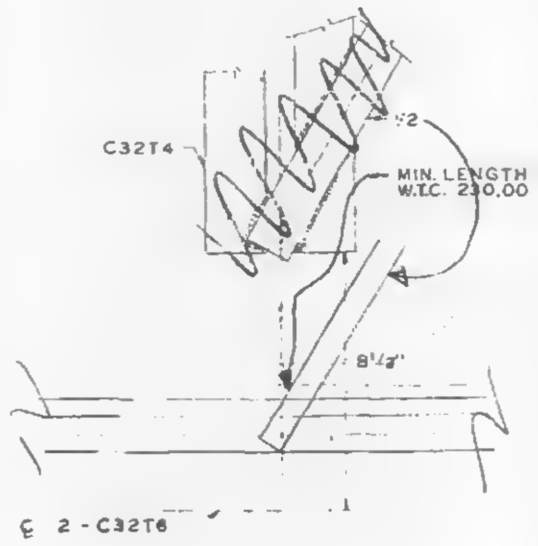
DETAIL "I"


L
5 1/2"
5 1/2"
5"
5"
AID
F2
F2
AA11
5/16" x 4" FILLET W.T.C. 223.00
PF-1
PF-1
C.P. BEVEL WELD W.T.C. 230.00
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
W.T.C. 214.00
NOTE 1 THIS SHEET
9 1/2"
EXT COL. REF. LINE
L

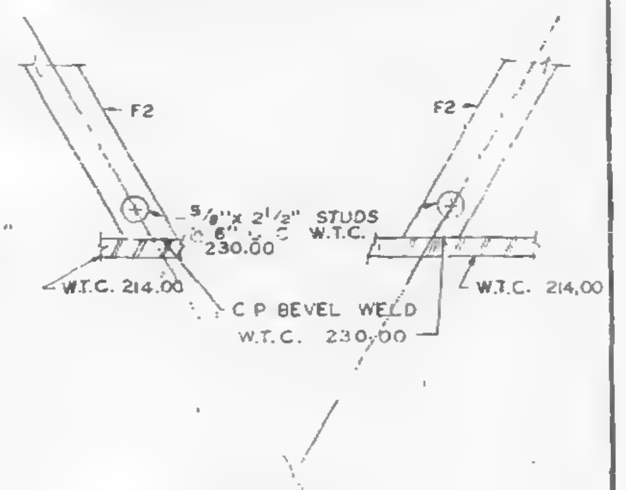
DETAIL "[illegible]"


5/16" FILLET WELD W.T.C. 230.00
BRIDGING ANGLE ASSEMBLY
F4
3/8" GAP FILLET MIN. 8" LONG W.T.C. 230.00
5/16" FILLET WELD W.T.C. 230.00
5/8" x 3" STUDS W.T.C. 230.00
9 1/2"
8 1/2"
EXT. COL. REF. LINE

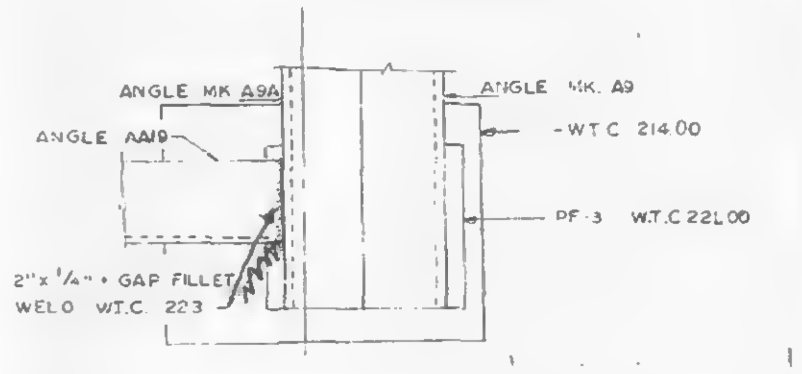
DETAIL T



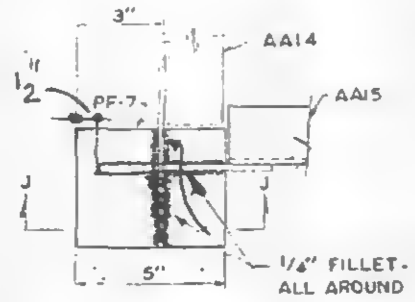
DETAIL "U"


F2
F2
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C. 230.00
W.T.C. 214.00
W.T.C. 214.00
C P BEVEL WELD W.T.C. 230.00

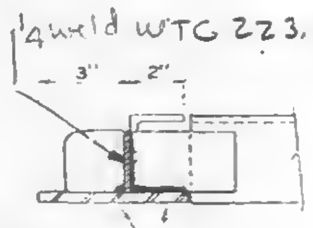
DETAIL "Q"



SECTION H-H (OPP. HAND FOR FR PANEL)

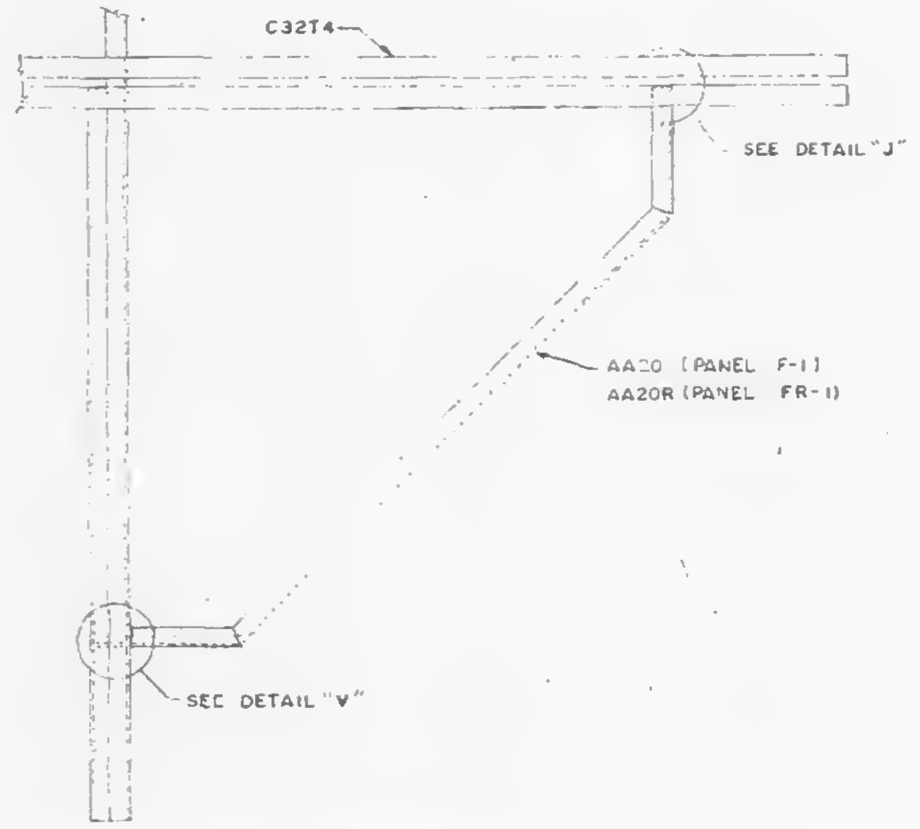


DETAIL "R"

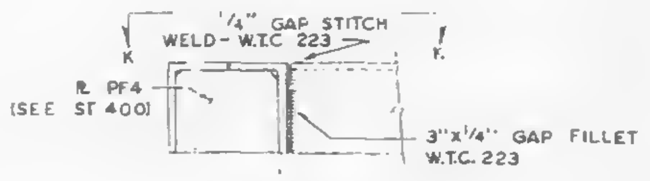


1/4 weld WTC 223.00

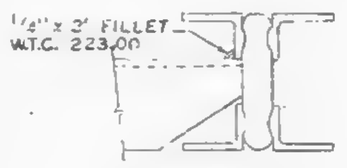
SECTION J-J



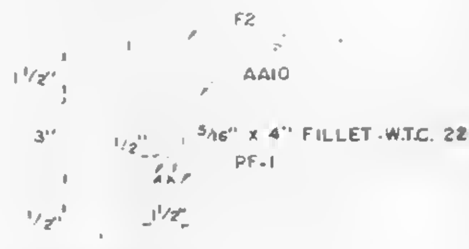
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR1-OPP HAND)


1/4" GAP STITCH WELD - W.T.C. 223
K
K
PL PF4 (SEE ST 400)
3" x 1/4" GAP FILLET W.T.C. 223

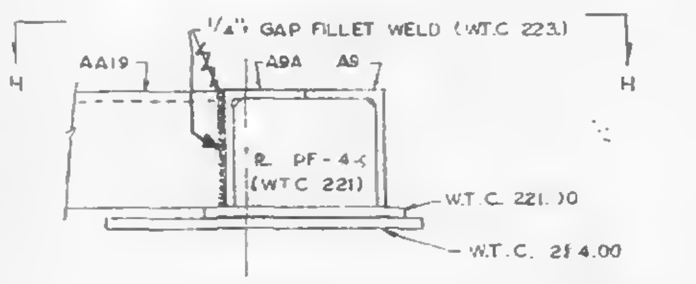
DETAIL "V"



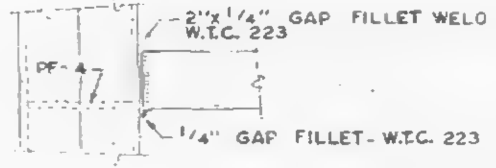
DETAIL "J"



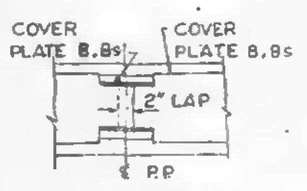
SECTION L-L



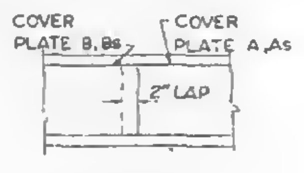
DETAIL "P" (OPP. HAND FOR FR PANEL)


2" x 1/4" GAP FILLET WELD W.T.C. 223
PF-4
1/4" GAP FILLET - W.T.C. 223

SECTION K-K

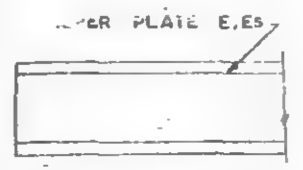


DETAIL "M"

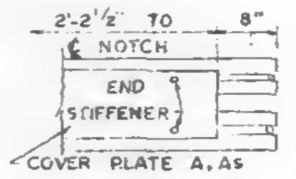


DETAIL "L"

COVER PLATES
*29 GA. THICK



DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

NOTE
1. DIMENSION IS 10 3/4" UP TO & INCL. FLOOR 74 AND IS 9 1/4" ABOVE FLOOR 74.

SKILLING · HELLE
CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
X
9/25/68 SK

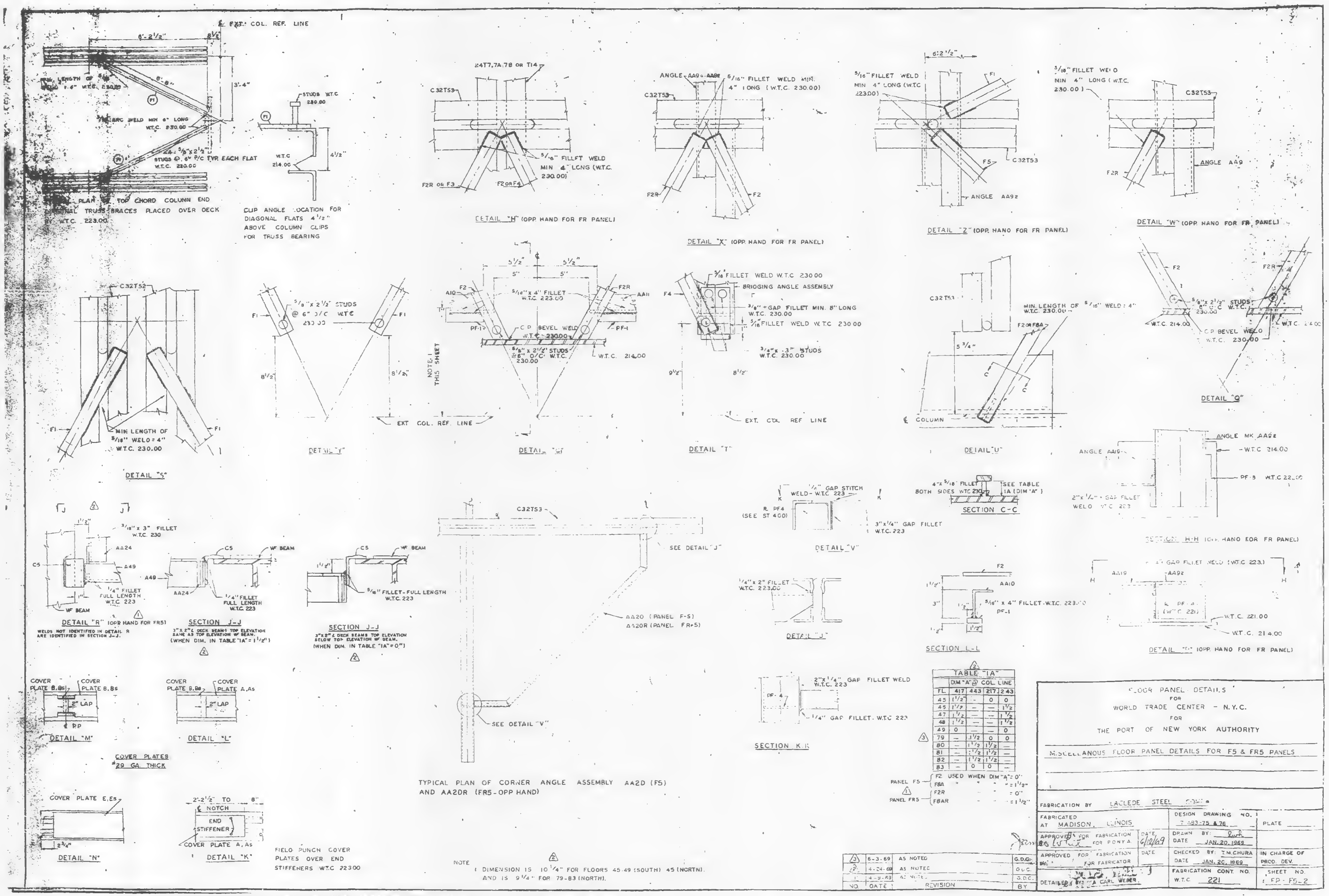
NO.	DATE	REVISION	BY
1	9-20-68	GENERAL	T.M.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-13 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: P.L. DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO. W.T.C 221	SHEET NO. FP-F1-2


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
3'-4"
PLAN @ TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C 230.00
W.T.C 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
24T7,7A,78 OR T14
C32TS3
5/16" FILLET WELD MIN 4" LONG (W.T.C 230.00)
F2R OR F3
F2 OR F4
DETAIL "H" (OPP. HAND FOR FR PANEL)
ANGLE AA9 - AA9Z
5/16" FILLET WELD MIN. 4" LONG (W.T.C. 230.00)
F2R
F2
DETAIL "X" (OPP. HAND FOR FR PANEL)
6'-2 1/2"
5/16" FILLET WELD MIN 4" LONG (W.T.C 223.00)
F1
F5
C32TS3
ANGLE AA9Z
DETAIL "Z" (OPP. HAND FOR FR PANEL)
5/16" FILLET WELD MIN 4" LONG (W.T.C. 230.00)
C32TS3
F2R
ANGLE AA9
DETAIL "W" (OPP. HAND FOR FR PANEL)
C32TS2
F1
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
DETAIL "S"
5/8" x 2 1/2" STUDS @ 6" O/C W.T.C 230.00
8 1/2"
EXT. COL. REF. LINE
DETAIL "Y"
5 1/2"
5"
AA10
AA11
F2
F2R
5/16" x 4" FILLET W.T.C. 223.00
PF-1
C.P. BEVEL WELD W.T.C. 230.00
5/8" x 2 1/2" STUDS @ 8" O/C W.T.C. 230.00
W.T.C. 214.00
NOTE 1 THIS SHEET
DETAIL "G"
F4
5/16" FILLET WELD W.T.C. 230.00
BRIDGING ANGLE ASSEMBLY
3/16" GAP FILLET MIN. 8" LONG W.T.C. 230.00
5/16" FILLET WELD W.T.C. 230.00
3/4" x 3" STUDS W.T.C. 230.00
9 1/2"
8 1/2"
EXT. COL. REF. LINE
DETAIL "T"
C32TS3
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 230.00
F2 OR F8A
5 3/4"
C
℄ COLUMN
DETAIL "U"
F2
F2R
5/8" x 2 1/2" STUDS @ 6" O.C. W.T.C. 230.00
W.T.C. 214.00
C.P. BEVEL WELD W.T.C. 230.00
DETAIL "Q"
ANGLE MK. AA9Z
ANGLE AA9
W.T.C. 214.00
PF-5 W.T.C. 223.00
2" x 1/4" GAP FILLET WELD W.T.C. 223
SECTION H-H (OPP. HAND FOR FR PANEL)
J
3/16" x 3" FILLET W.T.C. 230
1 1/2"
C5
AA24
AA49
A49
1/4" FILLET FULL LENGTH W.T.C. 223
WF BEAM
DETAIL "R" (OPP. HAND FOR FR5)
WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.
C5
WF BEAM
AA24
1/4" FILLET FULL LENGTH W.T.C. 223
SECTION J-J
3" x 2" ℄ DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION WF BEAM. (WHEN DIM. IN TABLE "IA" = 1 1/2")
C5
WF BEAM
1 1/2"
5/16" FILLET-FULL LENGTH W.T.C. 223
SECTION J-J
3" x 2" ℄ DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION WF BEAM. (WHEN DIM. IN TABLE "IA" = 0")
C32TS3
SEE DETAIL "J"
AA20 (PANEL F-5)
AA20R (PANEL FR-5)
SEE DETAIL "V"
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F5) AND AA20R (FR5 - OPP HAND)
1/4" GAP STITCH WELD - W.T.C. 223
K
R. PF4 (SEE ST 400)
3" x 1/4" GAP FILLET W.T.C. 223
DETAIL "V"
4" x 5/16" FILLET BOTH SIDES W.T.C. 230
SEE TABLE IA (DIM "A")
SECTION C-C
1/4" x 2" FILLET W.T.C. 223.00
DETAIL "J"
F2
AA10
1 1/2"
3"
5/16" x 4" FILLET - W.T.C. 223.00
PF-1
SECTION L-L
1/4" GAP FILLET WELD (W.T.C. 223.)
AA19
AA9Z
H
PF-4
W.T.C. 221.00
W.T.C. 214.00
DETAIL "P" (OPP. HAND FOR FR PANEL)
2" x 1/4" GAP FILLET WELD W.T.C. 223
PF-4
1/4" GAP FILLET - W.T.C. 223
SECTION K-K
COVER PLATE B,Bs
COVER PLATE B,Bs
2" LAP
DETAIL "M"
COVER PLATE B,Bs
COVER PLATE A,As
2" LAP
DETAIL "L"
COVER PLATES #29 GA. THICK
COVER PLATE E,Es
2 3/4"
DETAIL "N"
2'-2 1/2" TO 8"
NOTCH
END STIFFENER
COVER PLATE A,As
DETAIL "K"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00

NOTE ② DIMENSION IS 10 1/4" FOR FLOORS 45-49 (SOUTH) 45 (NORTH). AND IS 9 1/4" FOR 79-83 (NORTH).

TABLE "IA" ②

FL.	DIM "A" @ COL LINE 417	443	217	243
45	1 1/2	—	0	0
45	1 1/2	—	—	1 1/2
47	1 1/2	—	—	1 1/2
48	1 1/2	—	—	1 1/2
49	0	—	—	0
79	—	1 1/2	0	0
80	—	1 1/2	1 1/2	—
81	—	1 1/2	1 1/2	—
82	—	1 1/2	1 1/2	—
83	—	0	0	—

③

PANEL F5 — F2 USED WHEN DIM "A" = 0"
F8A " " " " = 1 1/2"
① PANEL FR5 — F2R " " " = 0"
F8AR " " " = 1 1/2"

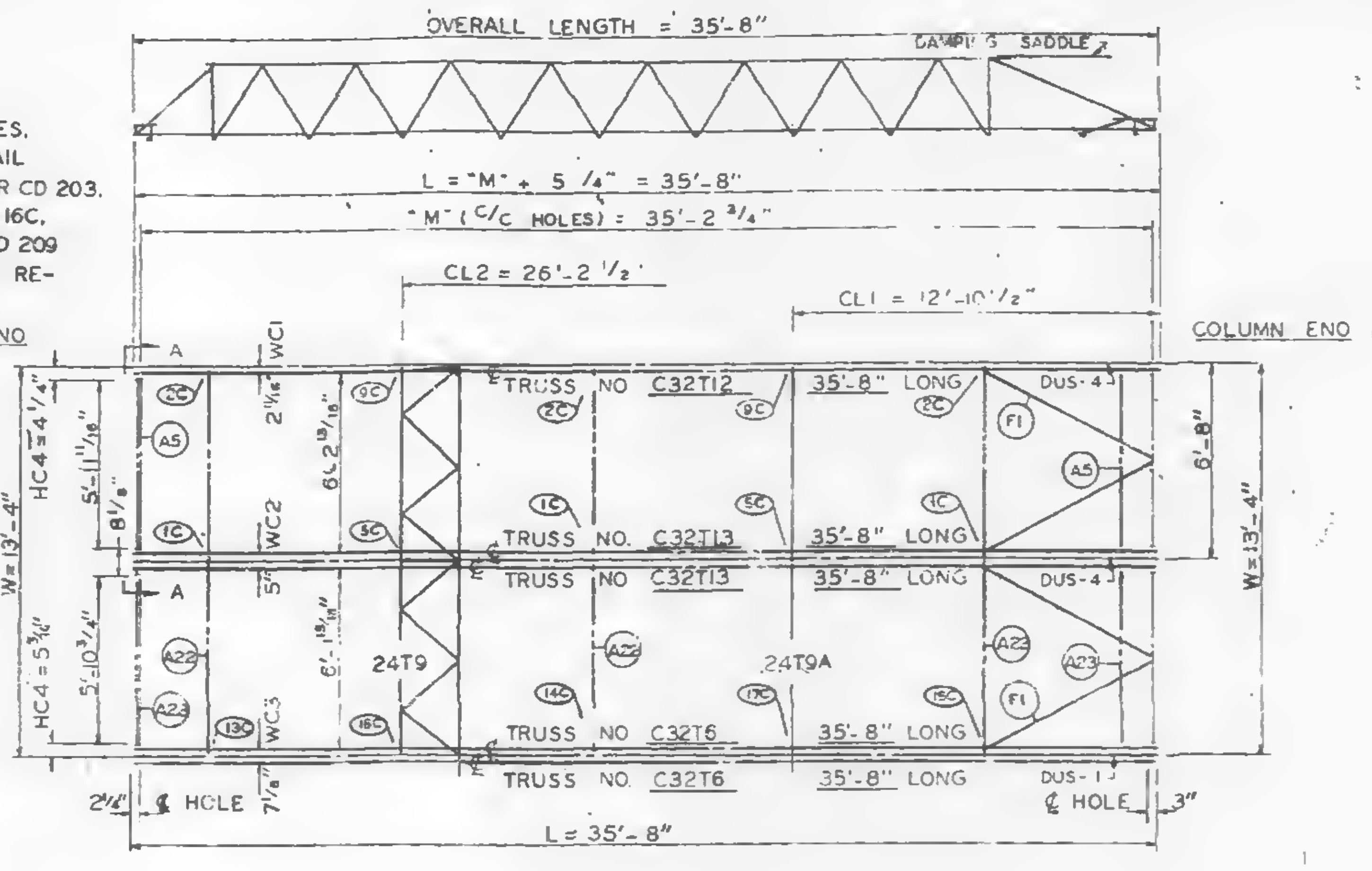
NO.	DATE	REVISION	BY
③	6-3-69	AS NOTED	G.D.C.
②	4-24-69	AS NOTED	G.D.C.
①	4-9-69	AS NOTED	G.D.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F5 & FR5 PANELS

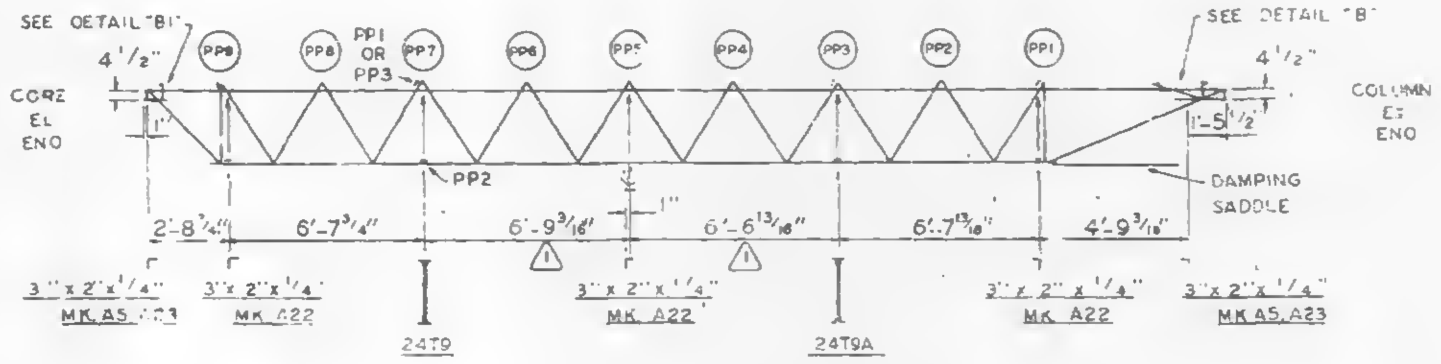
FABRICATION BY LACLEDE STEEL CO.
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 493-75 & 76
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 6/12/69
DRAWN BY: [illegible] DATE JAN. 20, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY: T.M. CHURA DATE JAN. 20, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F5-2

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 2D1, CD2D2 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

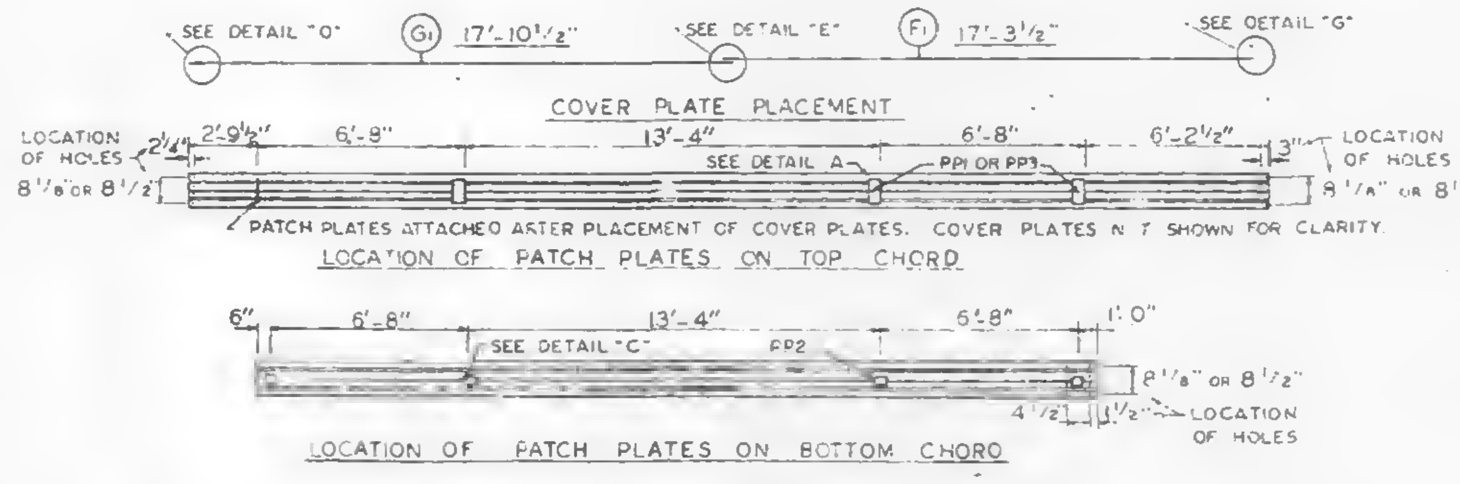

OVERALL LENGTH = 35'-8"
DAMPING SADDLE
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T12 35'-8" LONG
TRUSS NO. C32T13 35'-8" LONG
TRUSS NO. C32T13 35'-8" LONG
TRUSS NO. C32T6 35'-8" LONG
TRUSS NO. C32T6 35'-8" LONG
DUS-4
24T9
24T9A
WC1
WC2
WC3
W=13'-4"
HC4=4 1/4"
HC4=5 3/4"
6'-8"
W=13'-4"
2 1/4" ℄ HOLE
℄ HOLE 3"
L = 35'-8"

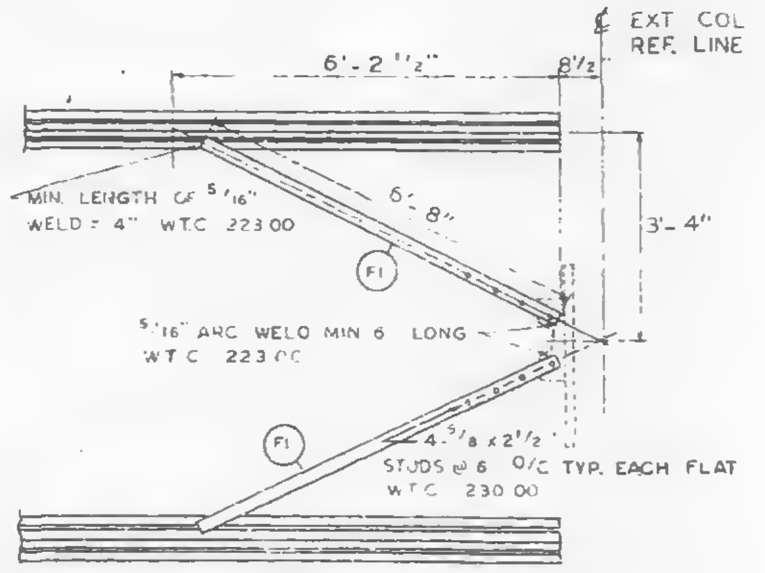
PANEL G1 SIZE 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

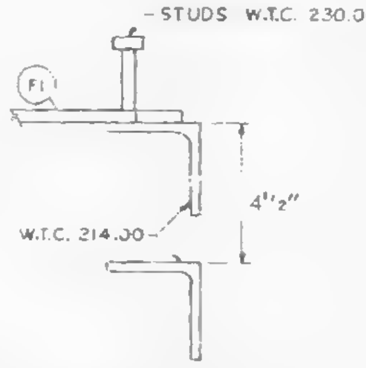


PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.




℄ EXT COL REF. LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
3'-4"
F1
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
4 5/8 x 2 1/2
STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
F1

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

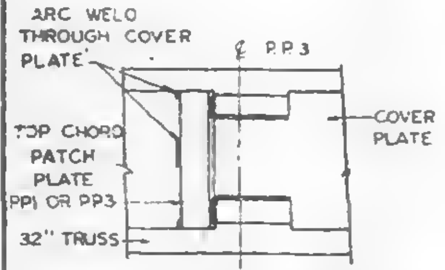
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRIDGING TRUSSES	T9	1	24T9 - 13'-2 3/4"	BT 209
	T9A	1	24T9A - 13'-2 3/4"	BT 209A
3"x 2"x 1/4" ANGLE	A5	2	3"x 2"x 1/4" x 6'-1 13/16"	ST 403
	A22	3	3"x 2"x 1/4" x 13'-3 1/2"	ST 405
	A23	2	3"x 2"x 1/4" x 6'-0 7/8"	ST 405
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	4	2" x 1/4" x 0'-9"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
	PP3	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	G1	1	7" x 0135" x 7'-10 1/2"	ST 303
	F1	1	7" x 0135" x 17'-3 1/2"	ST 303
	G	1	9" x .0135" x 17'-10 1/2"	ST 303
	F	1	9" x .0135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C1	2**	2" x 1 1/2" x 1/4" x 6"	ST 400
	C2	6**	2 1/2" x 1 1/2" x 1/4" x 6"	
△3	C1	8*	2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST 400
	SA2	3	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-4	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

△3 *CHANGE BECOMES EFFECTIVE AFTER FLOOR 33, TOWER A.
**UP TO FLOOR 33, TOWER A

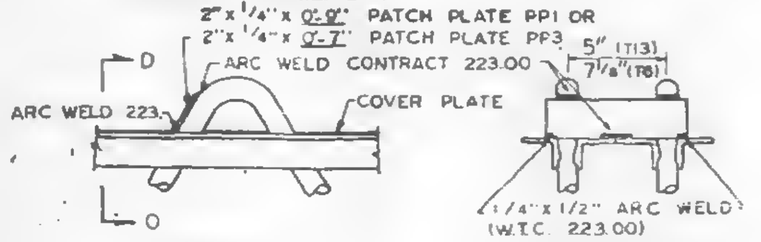
COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.

NO.	DATE	REVISION	BY
△3	6-3-69	AS NOTED	G.D.C.
△2	4-18-69	AS NOTED	G.D.C.
△1	2-21-69	AS NOTED	G.D.C.

REF. DWGS.	
7-A84-3 & 4	5-68
7-A84-5 & 6	5-6-68
7-A84-39, 41	3-68
SA-124	10-20-67
7-A83-2	3-68
7-A81-11 & 12	5-10-68
7-A82-6	2-15-68
7-A84-42	4-1-68

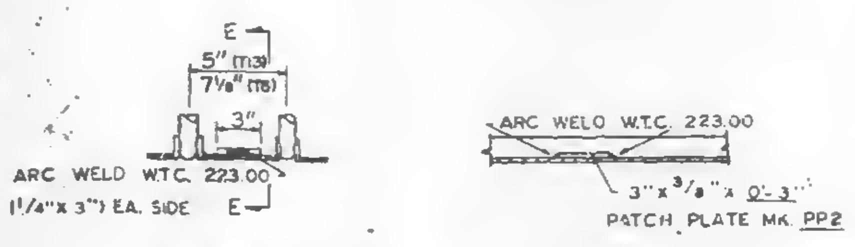

ARC WELD THROUGH COVER PLATE
℄ PP3
COVER PLATE
TOP CHORD PATCH PLATE PP1 OR PP3
32" TRUSS

TOP VIEW - DETAIL "A"


2"x 1/4" x 0'-9" PATCH PLATE PP1 OR
2"x 1/4" x 0'-7" PATCH PLATE PP3
ARC WELD CONTRACT 223.00
5" (T13)
7 1/8" (T6)
D
ARC WELD 223
COVER PLATE
D
1/4" x 1/2" ARC WELD (W.T.C. 223.00)

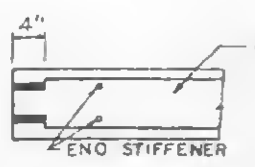
DETAIL "A"

SECTION D-D

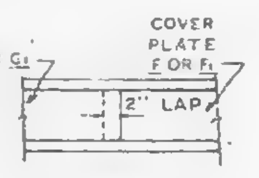


DETAIL "C"

SECTION E-E



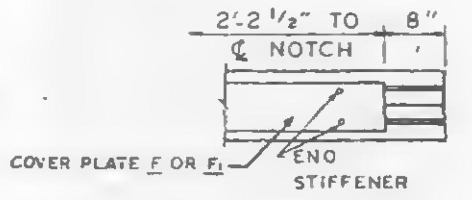
DETAIL "O"



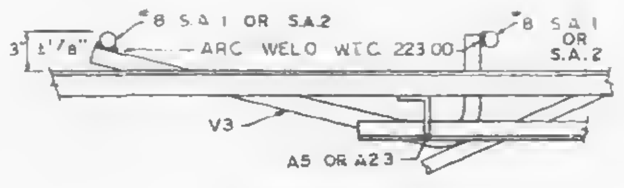
DETAIL "E"

COVER PLATES
#29 GA. THICK

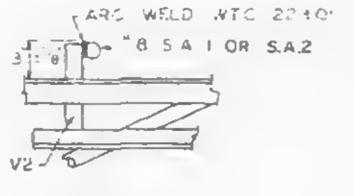
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



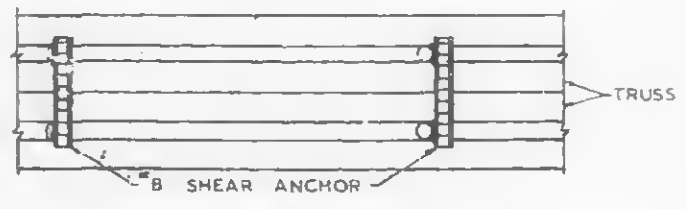
DETAIL "G"



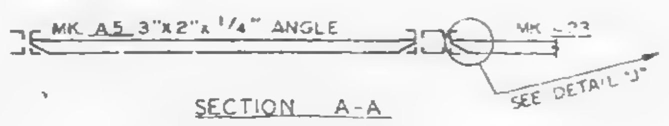
DETAIL "B"



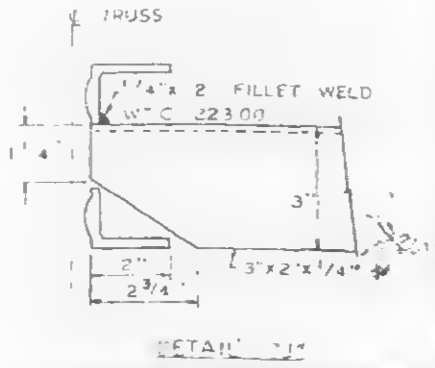
DETAIL "B1"



TOP VIEW - DETAIL "B"



SECTION A-A
END SUPPORT ANGLES



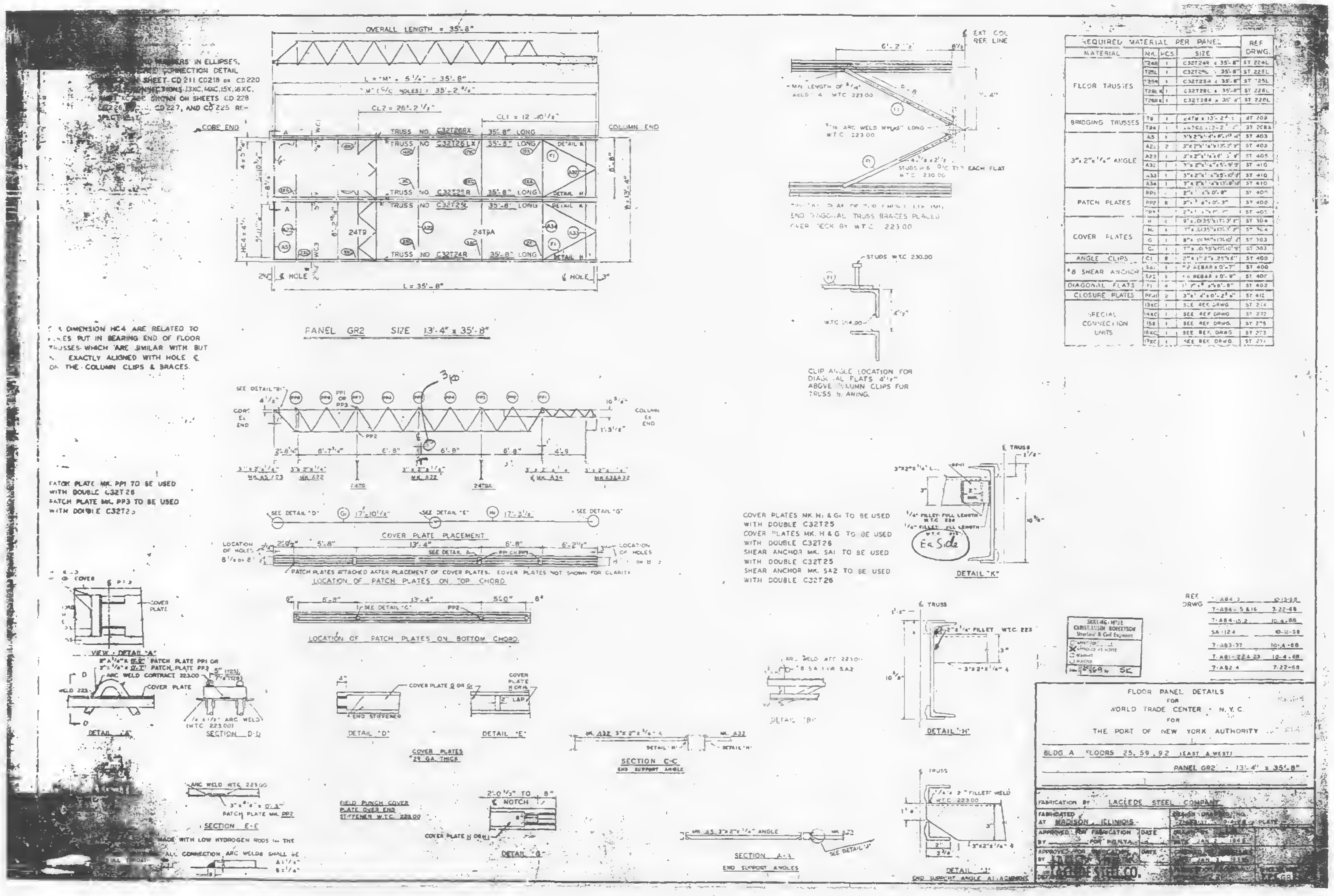
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
1" A = 1/4" B = 1/4"

PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 &
93-106 (E & W) 45-49 (W) 80-83 (E) PANEL G1 - 13'-4" x 35'-8"
△2 BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-106 (N & S) 80-83 (N) 45-49 (S)

FABRICATION BY ALLIED STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-1 5-10-68	PLATE
APPROVED FOR FABRICATION BY [illegible] DATE 6/12/69	DRAWN BY L.R. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE	CHECKED BY T.M CHURA DATE APRIL 10, 1968	
DETAILED BY A. WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-G1


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/2" = 35'-8"
"M" (C/C HOLES) = 35'-2 1/2"
CL2 = 28'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T26RX 35'-8" LONG
TRUSS NO. C32T26LX 35'-8" LONG
TRUSS NO. C32T25R 35'-8" LONG
TRUSS NO. C32T25L 35'-8" LONG
TRUSS NO. C32T24R 35'-8" LONG
DETAIL "K"
24T9
24T9A
HC4 = 4'
℄ HOLE
L = 35'-8"
PANEL GR2 SIZE 13'-4" x 35'-8"
NUMBERS IN ELLIPSES. CONNECTION DETAIL SHEET CD 211 CD218 OR CD 220 CONNECTIONS 13XC, 14XC, 15X, 16XC, XC ARE SHOWN ON SHEETS CD 228 CD 226, CD 227, AND CD 225 RESPECTIVELY.
DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
SEE DETAIL "B"
CORE ℄ END
COLUMN ℄ END
PP1 OR PP3
PP2
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
COVER PLATE PLACEMENT
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
COVER PLATE
VIEW - DETAIL "A"
PATCH PLATE PP1 OR PATCH PLATE PP3
ARC WELD CONTRACT 223.00
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATE D OR G1
END STIFFENER
COVER PLATES 24 GA. THICK
SECTION C-C END SUPPORT ANGLE
ARC WELD W.T.C. 223.00
PATCH PLATE MK. PP2
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
NOTCH
COVER PLATE H OR H1
DETAIL "G"
MADE WITH LOW HYDROGEN RODS ... ALL CONNECTION ARC WELDS SHALL BE
SECTION A-A END SUPPORT ANGLES
EXT. COL. REF. LINE
6'-2 1/2"
END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-1" ABOVE COLUMN CLIPS FOR TRUSS BRACING.
COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26
℄ TRUSS
1/4" FILLET FULL LENGTH W.T.C. 223
Ea Side
DETAIL "K"
DETAIL "B"
DETAIL "H"
DETAIL "J" END SUPPORT ANGLE AT ATTACHMENT
3'o

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T24R	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX	1	C32T26L x 35'-8"	ST 226L
	T26RX	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 [illegible]	ST 209
	T9A	1	24T9A x 13'-2 [illegible]	ST 209A
3" x 2" x 1/4" ANGLE	A5	1	[illegible]	ST 403
	A21	2	[illegible]	ST 403
	A22	1	[illegible]	ST 405
	A32	1	[illegible]	ST 410
	A33	1	[illegible]	ST 410
	A34	1	[illegible]	ST 410
PATCH PLATES	PP1	-	[illegible]	ST 400
	PP2	8	[illegible]	ST 400
	PP3		[illegible]	ST 400
COVER PLATES	H	1	9" x .0135" x 17'-3 1/2"	ST 304
	H1	1	7" x .0135" x 17'-3 1/2"	ST 304
	G	1	8" x .0135" x 17'-10 1/2"	ST 303
	G1	1	7" x .0135" x 17'-10 1/2"	ST 303
ANGLE CLIPS	C1	8	[illegible]	ST 400
#8 SHEAR ANCHOR	SA1	1	#8 REBAR x 0'-7"	ST 400
	SA2	1	#8 REBAR x 0'-9"	ST 400
DIAGONAL FLATS	F1	4	[illegible]	ST 402
CLOSURE PLATES	PF41	2	[illegible]	ST 412
SPECIAL CONNECTION UNITS	13XC	1	SEE REF. DRWG	ST 274
	14XC	1	SEE REF. DRWG	ST 272
	15X	1	SEE REF. DRWG.	ST 275
	16XC	1	SEE REF. DRWG	ST 273
	17XC	1	SEE REF. DRWG.	ST 271

REF. DRWG	
7-A84-3	10-15-68
7-A84-5 & 16	7-22-68
7-A84-15.2	10-4-68
SA-124	10-11-68
7-A83-37	10-4-68
7-A81-22 & 23	10-4-68
7-A82-4	7-22-68

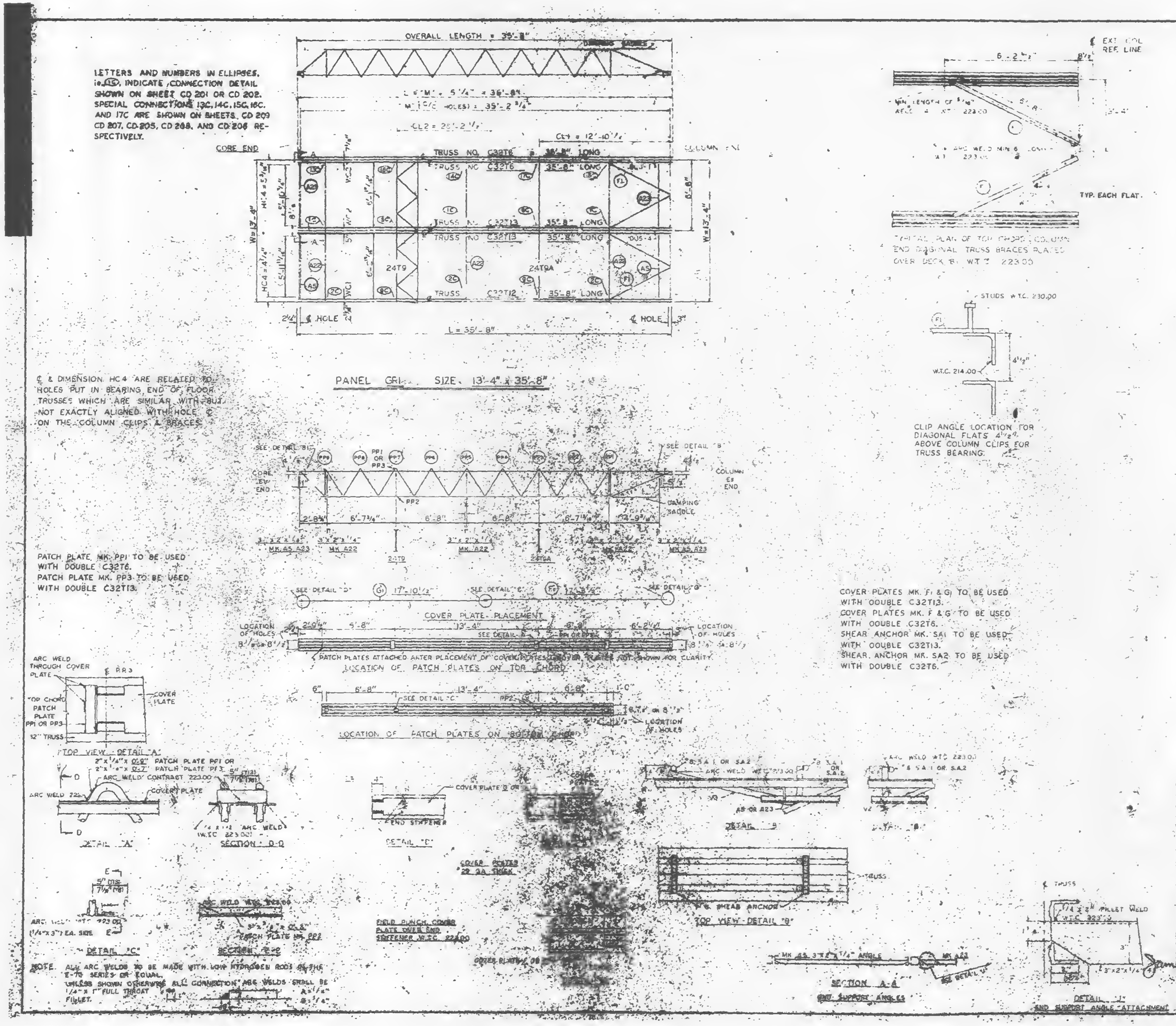
SKILLING, HELLE, CHRISTIANSEN, ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
2/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92 (EAST & WEST)
PANEL GR2 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. DATE
DATE JAN 2, 1969
JAN 3, 1969

LETTERS AND NUMBERS IN ELLIPSES, ie. (15), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C. AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 268, AND CD 206 RESPECTIVELY.


OVERALL LENGTH = 35'-8"
CORE END
COLUMN END
TRUSS NO. C32T6 35'-8" LONG
TRUSS NO. C32T13 35'-8" LONG
TRUSS C32T12 35'-8" LONG
24T9
24T9A
L = 35'-8"
℄ HOLE
W = 13'-4"
PANEL GR1 SIZE 13'-4" x 35'-8"
TYP. EACH FLAT
TYPICAL PLAN OF TOP CHORD @ COLUMN END DIAGONAL TRUSS BRACES PLATES OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
STUDS W.T.C. 230.00
W.T.C. 214.00
SEE DETAIL "B"
DAMPING SADDLE
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "E"
DETAIL "B"
TOP VIEW - DETAIL "B"
COVER PLATES 22 GA. THICK
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
SECTION A-A
END SUPPORT ANGLES
DETAIL
END SUPPORT ANGLE ATTACHMENT
ARC WELD W.T.C. 223.00
(¼"x3") EA. SIDE
DETAIL "C"
SECTION E-E
PATCH PLATE MK. PP2
#8 SHEAR ANCHOR

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OF THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x 1" FULL THROAT FILLET.

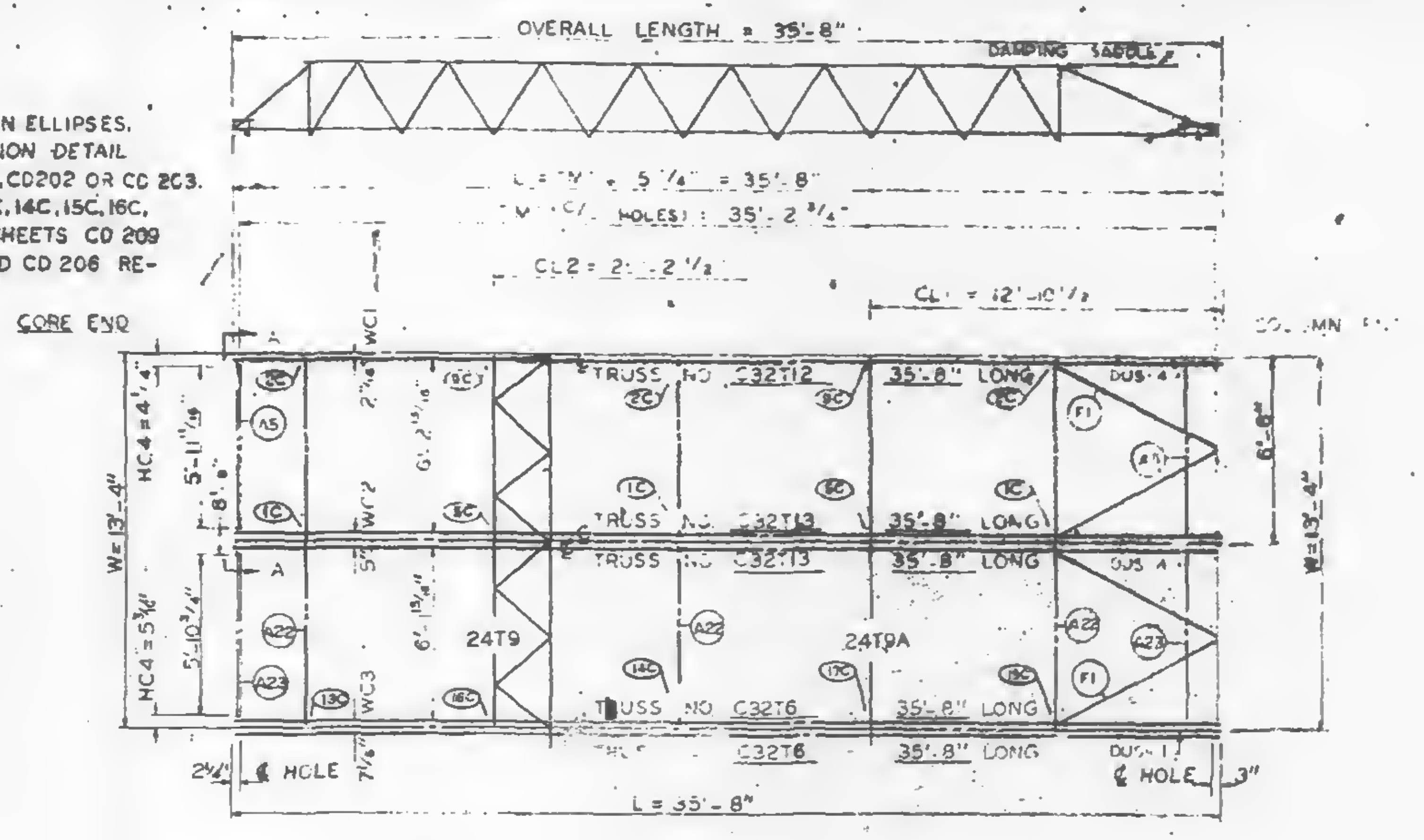
REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 208
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRIDGING TRUSSES	T9	1	24T9 - 13'-2¾"	ST 209
	T9A	1	24T9A - 13'-2¾"	ST 209A
[illegible]	A5	2	[illegible] x 6'-1¹³⁄₁₆"	ST 403
	A22	2	3" x 2" x ¼" x [illegible]	ST 405
	A23	2	[illegible]	ST 405
DIAGONAL FLAT	F1	4	[illegible] x 6'-8"	ST 412
PATCH PLATES	PP1	4	2" x ¼" x [illegible]	ST 400
	PP2	8	3" x ⅛" x 0'-3"	ST 400
	PP3	4	2" x ¼" x 0'-7"	ST 400
COVER PLATES	G1	1	7" x .0135" x 17'-[illegible]	ST 303
	F1	1	7" x .0135" x 7'-3½"	ST 303
	G	1	9" x .0135" x 17'-10½"	ST 303
	F	1	9" x .0135" x 17'-3½"	ST 303
ANGLE CLIPS	C2	6	2½" x 1½" x ¼" x 6"	ST 400
	C1	2	2" x 1½" x ¼" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST 400
	SA2	3	#8 REBAR x 0'-[illegible]	ST 400
DAMPING SADDLE	DUS-4	1	3½" x 3½" x ⅜" x [illegible]-6⅞"	ST 298
	DUS-1	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

THE PORT OF NEW YORK AUTHORITY

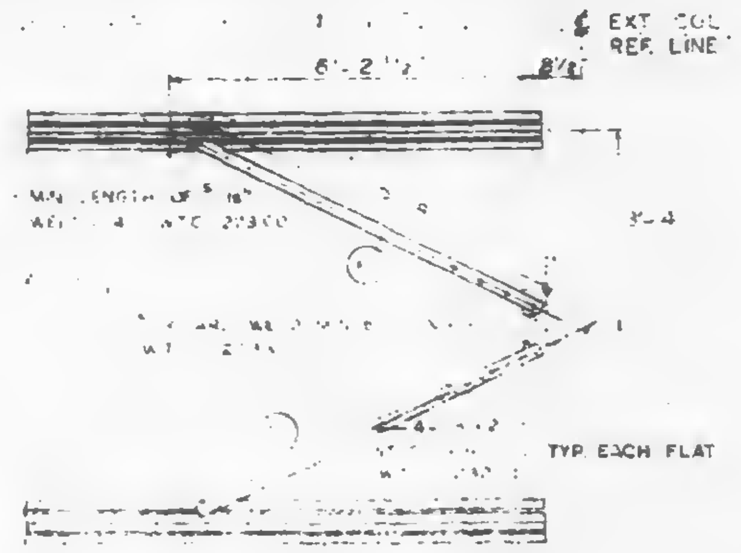
BLDG A FLOORS [illegible] 40, [illegible] 68-74, 84-91 &
93-106 (EAST & WEST) PANEL GR1 - 13'-4" x 35'-8"
79-83 (WEST) 46-49 (EAST)

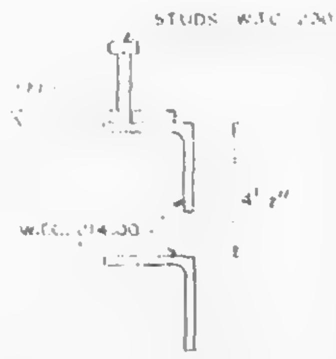
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-16 5-10-68	PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 8/16/68	DRAWN BY [illegible] DATE APRIL [illegible] 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL [illegible] 1968	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-GR1

LETTERS AND NUMBERS IN ELLIPSES, Ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD202 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.



PANEL G1 SIZE 13'-4" x 35'-8"

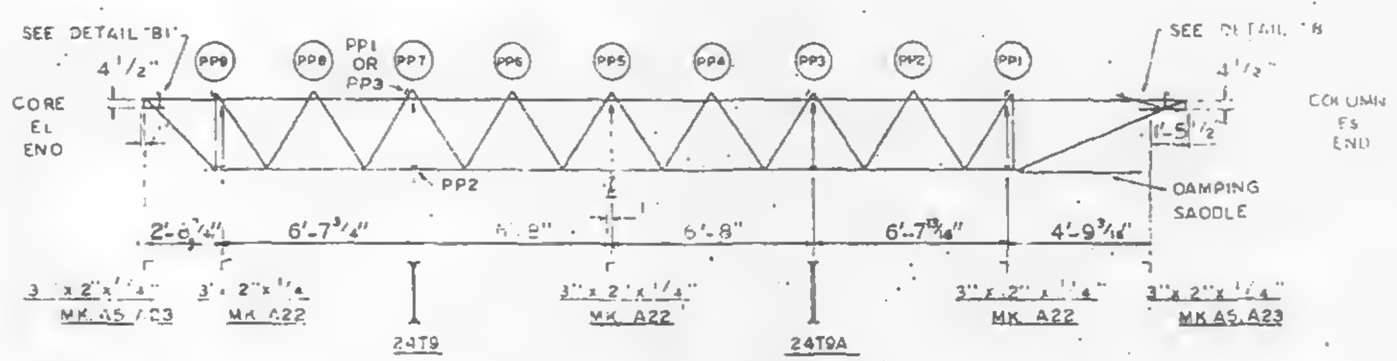




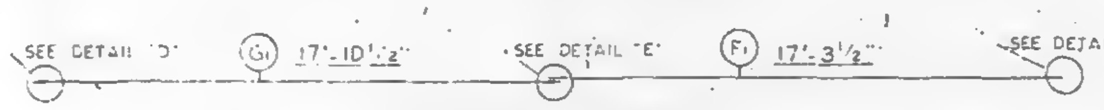
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 35'-8"	ST 306
	T12	1	C32T12 - 35'-8"	ST 312
	T13	2	C32T13 - 35'-8"	ST 313
BRIDGING TRUSSES	T9	1	24T9 - 13'-2 3/4"	ST 308
	T9A	1	24T9A - 13'-2 3/4"	ST 308A
3x2x1/4 ANGLE	A5	2	3"x2"x1/4"x 8'-1 13/16"	ST 403
	A22	3	3"x2"x1/4"x 13'-3 1/2"	ST 403
	A23	2	3"x2"x1/4"x 8'-0 1/8"	ST 403
DIAGONAL FLATS	F	4	2"x3/8"x 8'-8"	ST 412
PATCH PLATES	PP1	4	2" x 1/4" x 0'-9"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
	PP3	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	G1	1	7"x .0135"x 17'-10 1/2"	ST 303
	F1	1	7"x .0135"x 17'-3 1/2"	ST 303
	G	1	9"x .0135"x 17'-10 1/2"	ST 303
	F	1	9"x .0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	5	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
	C1	2	2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST 400
	SA2	3	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-4	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
	DUS-1	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

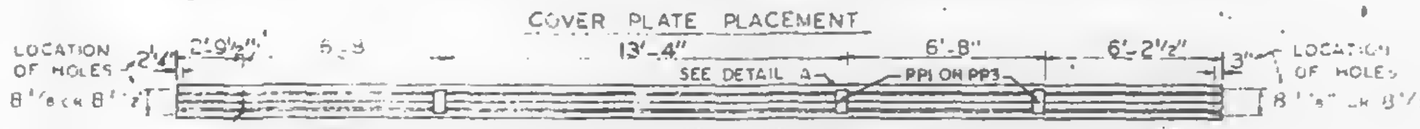
℄ & DIMENSION HC4 ARE RELATED TO HOLES P'T IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

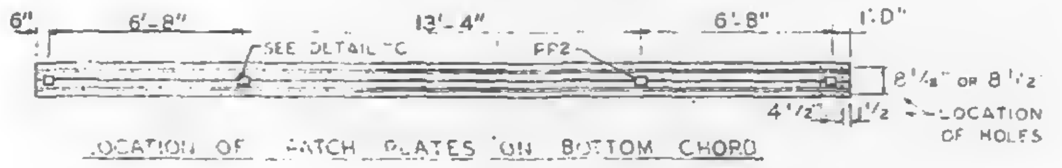


COVER PLATE PLACEMENT



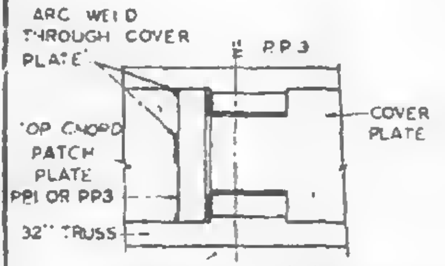
* PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

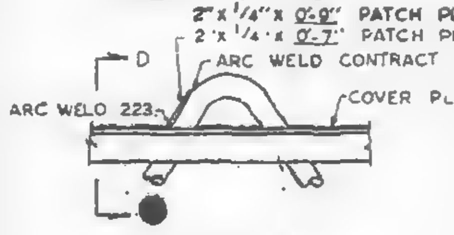


LOCATION OF PATCH PLATES ON BOTTOM CHORD

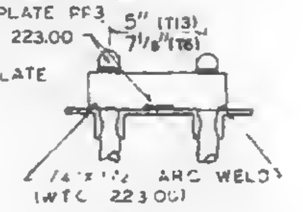
COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.


ARC WELD THROUGH COVER PLATE
℄ PP3
COVER PLATE
TOP CHORD PATCH PLATE PP1 OR PP3
32" TRUSS

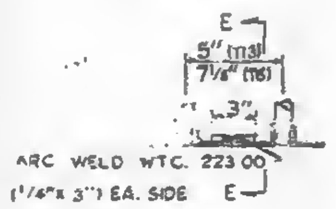
TOP VIEW - DETAIL "A"


2"x 1/4"x 0'-9" PATCH PLATE PP1 OR
2"x 1/4"x 0'-7" PATCH PLATE PP3
ARC WELD CONTRACT 223.00
D
ARC WELD 223
COVER PLATE

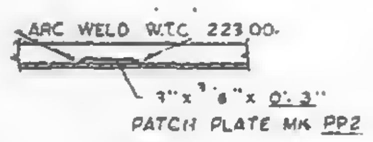
DETAIL "A"



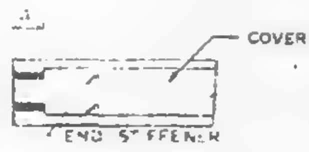
SECTION D-D



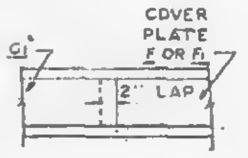
DETAIL "C"



SECTION E-E



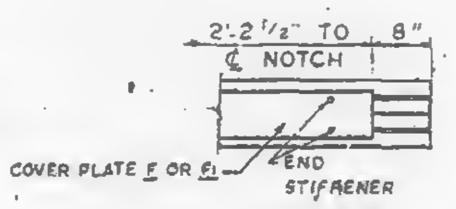
DETAIL "D"



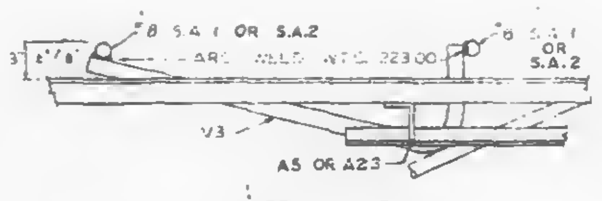
DETAIL "E"

COVER PLATES #29 GA. THICK

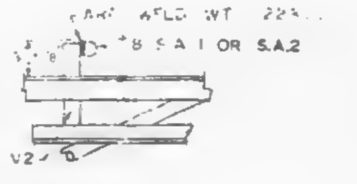
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 222.00



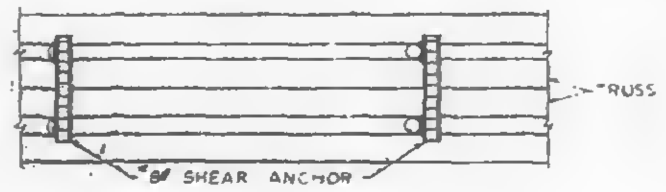
DETAIL "G"



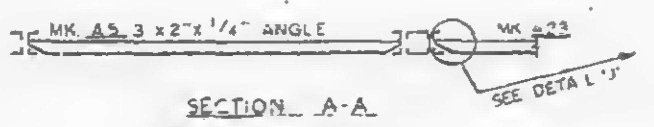
DETAIL "B"



DETAIL "B1"

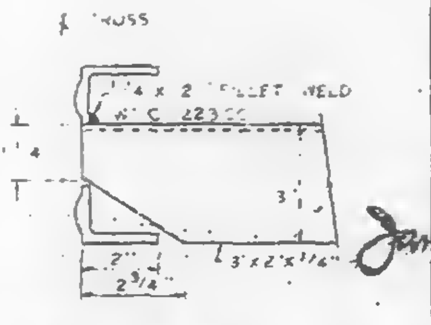


TOP VIEW - DETAIL "B"



SECTION A-A

END SUPPORT ANGLES



DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

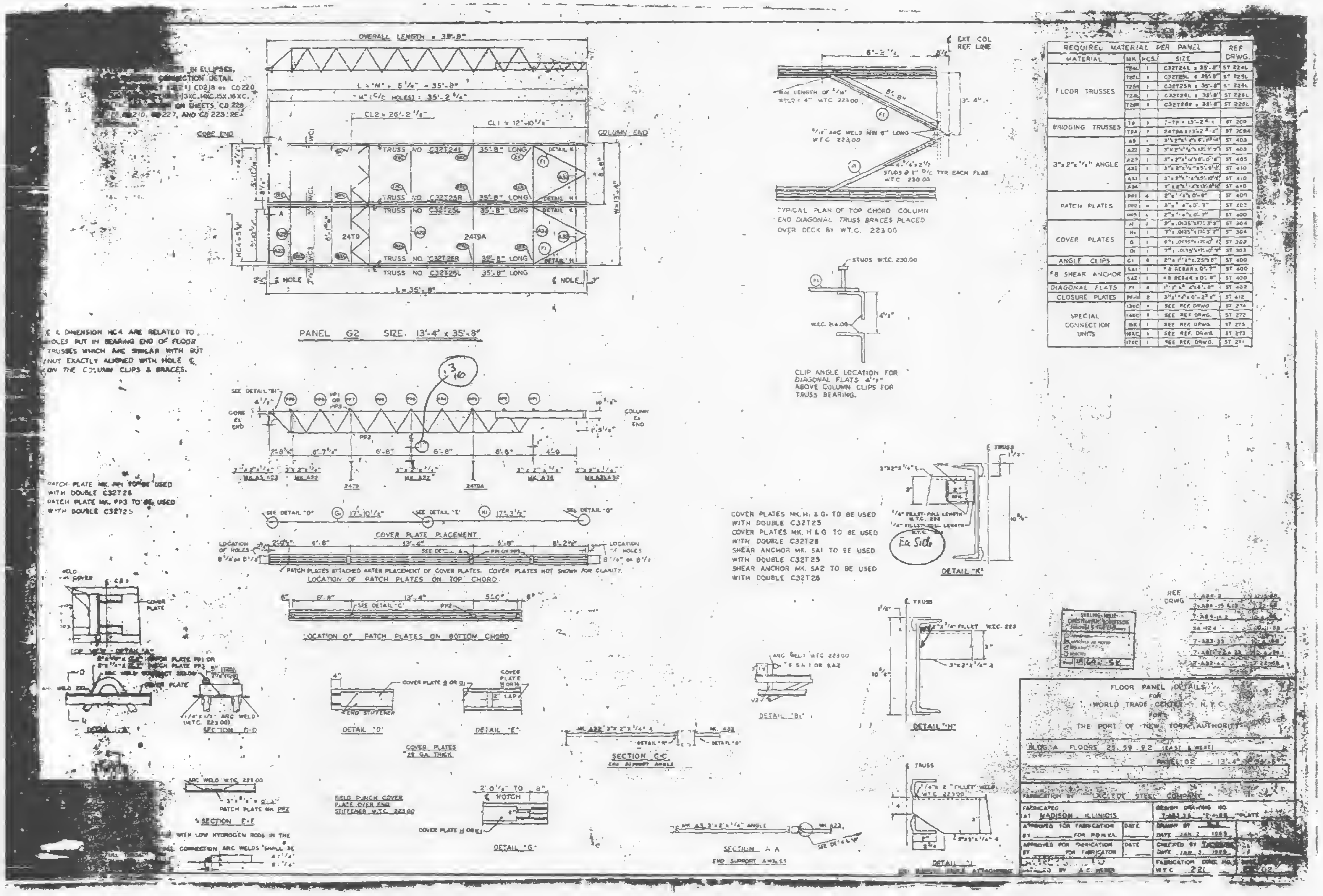
REF DRWG	
A83-3 & 4	1-3-68
7 A84-5 & 6	5-6-68
7 A84-39-41	1-3-68
SA-124	10-20-67
7 A83-2	1-3-68
7 A81-11 & 12	5-10-68
7 A82-6	2-15-68
7 A84-42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 &
93-106 (EAST & WEST) PANEL G1 13'-4" x 35'-8"
45-49 (WEST) 80-83 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-1 5-10-68 PLATE
APPROVED FOR FABRICATION BY James FOR P.O.N.Y.A.	DATE 8/19/68	DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 10, 1968
DETAILED BY A C WEBER		FABRICATION CONT. NO. W.T.C. 221
		SHEET NO. FP-G1



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 [illegible]	ST 209
	T9A	1	24T9A x 13'-2 [illegible]	ST 209A
3" x 2" x 1/4" ANGLE	A5	1	3" x 2" x 1/4" x 6'-[illegible]	ST 403
	A22	2	3" x 2" x 1/4" x 13'-[illegible]	ST 403
	A23	1	3" x 2" x 1/4" x 8'-0" [illegible]	ST 405
	A32	1	3" x 2" x 1/4" x 5'-9 1/2"	ST 410
	A33	1	3" x 2" x 1/4" x 5'-[illegible]	ST 410
	A34	[illegible]	3" x 2" x 1/4" x 13'-[illegible]	ST 410
PATCH PLATES	PP1	4	2" x 1/4" x 0'-8"	ST 400
	PP2	[illegible]	3" x [illegible] x 0'-3"	ST 402
	PP3	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	H	1	9" x .0135" x 17'-3 1/2"	ST 304
	H1	1	7" x .0135" x 17'-3"	ST 304
	G	1	6" x .0135" x 17'-10"	ST 303
	G1	1	7" x .0135" x 17'-10"	ST 303
ANGLE CLIPS	C1	6	2" x 1 1/2" x .25" x 8"	ST 400
#8 SHEAR ANCHOR	SA1	1	#8 REBAR x 0'-7"	ST 400
	SA2	1	#8 REBAR x 0'-8"	ST 400
DIAGONAL FLATS	F1	4	1 1/2" x [illegible] x 6'-8"	ST 402
CLOSURE PLATES	PP-11	2	3" x 1/4" x 0'-2 [illegible]"	ST 412
SPECIAL CONNECTION UNITS	13XC	1	SEE REF. DRWG.	ST 274
	14XC	1	SEE REF. DRWG.	ST 272
	15X	1	SEE REF. DRWG.	ST 275
	16XC	1	SEE REF. DRWG.	ST 273
	17XC	1	SEE REF. DRWG.	ST 271

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
68 SE

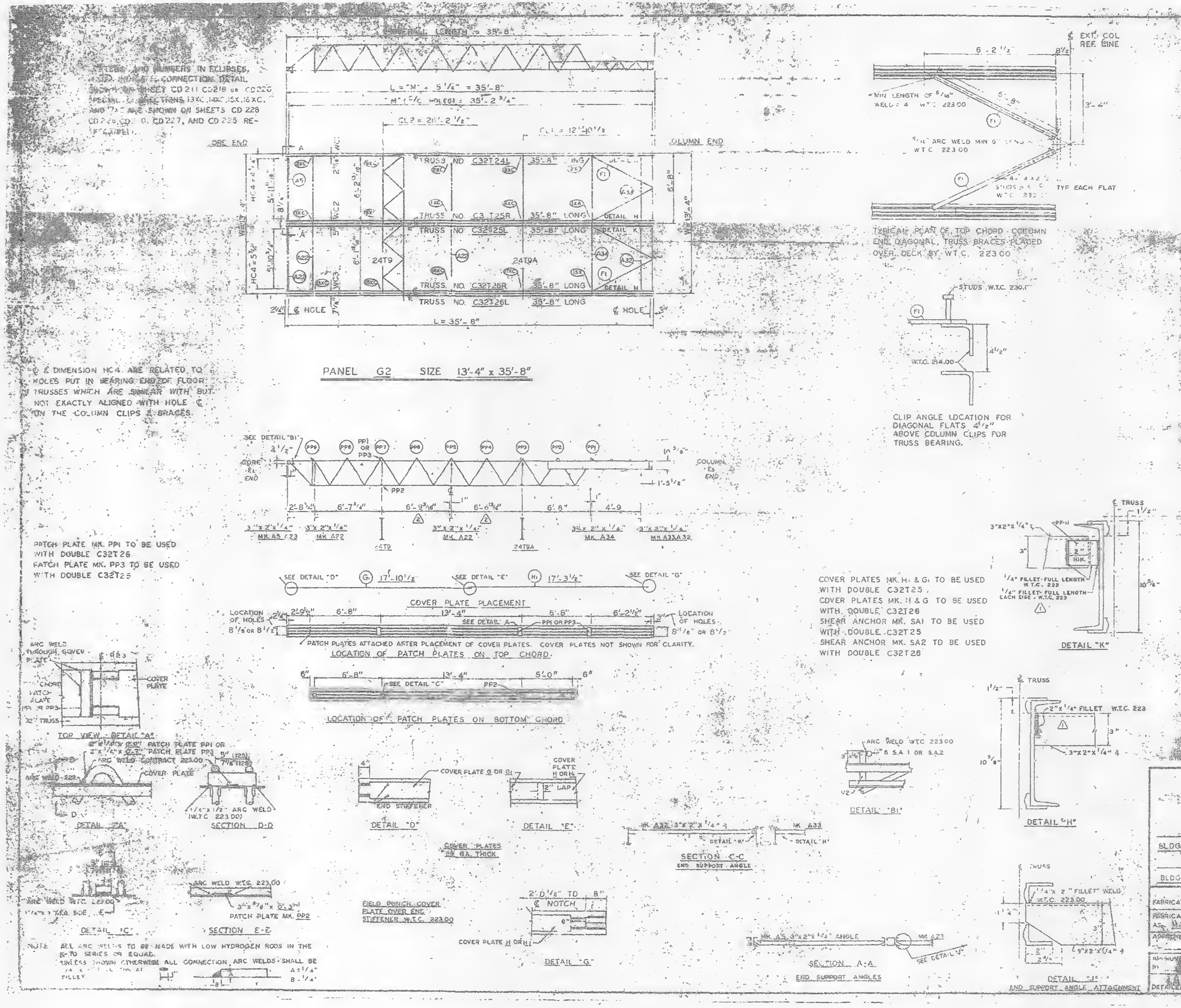
REF. DRWG
7-A82-3
7-A84-15 & 13 7-22-68
7-A84-15 2
SA-124 10-11-68
7-A83-33 10-4-68
7-A81-22 & 23
7-A82-44 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92 (EAST & WEST)
PANEL G2 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-35 10-4-68 PLATE	
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE JAN. 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE JAN. 3, 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	G2


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" C/C HOLES = 35'-2 3/4"
CL2 = 20'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T24L 35'-8" LONG
TRUSS NO. C32T25R 35'-8" LONG
TRUSS NO. C32T25L 35'-8" LONG
TRUSS NO. C32T26R 35'-8" LONG
TRUSS NO. C32T26L 35'-8" LONG
24T9
24T9A
DETAIL H
DETAIL K
℄ HOLE
L = 35'-8"
13'-4"
EXT. COL REF. LINE
6'-2 1/2"
3'-4"
STUDS W.T.C. 230
W.T.C. 214.00
4 1/2"
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
17'-10 1/2"
17'-3 1/2"
COVER PLATE PLACEMENT
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES 22 GA. THICK
SECTION C-C
END SUPPORT ANGLE
DETAIL "B"
DETAIL "C"
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL "G"
SECTION A-A
END SUPPORT ANGLES
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
DETAIL "K"
DETAIL "H"
2"x1/4" FILLET W.T.C. 223
1/4" FILLET-FULL LENGTH W.T.C. 223
ARC WELD W.T.C. 223.00

[illegible] AND NUMBERS IN ELLIPSES, [illegible] INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 211 CD218 OR CD220. SPECIAL CONNECTIONS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228 CD 226, CD 230, CD 227, AND CD 225 RESPECTIVELY.

TYPICAL PLAN OF TOP CHORD - COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

PANEL G2 SIZE 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SHEAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FILLET. A = 1/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T8	1	24T9 x 13'-2 3/4"	ST [illegible]
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3" x 2" x 1/4" ANGLE	A5	1	3"x2"x1/4"x[illegible]	ST 403
	A22	2	3"x2"x1/4"x[illegible]	ST 403
	A23	1	3"x2"x1/4"x[illegible]	ST 405
	A32	1	3"x2"x1/4"x5'-9 1/2"	ST 41[illegible]
	A33	1	3"x2"x1/4"x5'-10 1/2"	ST 410
	A34	1	3"x2"x1/4"x13'-8 1/4"	ST [illegible]
PATCH PLATES	PP1	4	2"x1/4"x0'-8"	ST 400
	PP2	8	3"x1/8"x0'-3"	ST 400
	PP3	4	2"x1/4"x0'-7"	ST 400
COVER PLATES	H	1	9"x.0135"x17'-3 1/2"	ST 304
	H1	1	7"x.0135"x17'-3 1/2"	ST 304
	G	1	9"x.0135"x17'-10 1/2"	ST 303
	G1	1	7"x.0135"x17'-10 1/2"	ST 303
ANGLE CLIPS	C1	8	2"x1 1/2"x.25"x6"	ST 400
#8 SHEAR ANCHOR	SA1	1	#8 REBAR x 0'-7"	ST 400
	SA2	1	#6 REBAR x 0'-9"	ST 400
DIAGONAL FLATS	F1	4	[illegible]	ST 402
CLOSURE PLATES	PF-11	2	3"x1/4"x0'-2 3/8"	ST 41[illegible]
SPECIAL CONNECTION UNITS	13XC	1	SEE REF DRWG	ST [illegible]74
	14XC	1	SEE REF DRWG	ST 272
	15X	1	SEE REF DRWG	ST 275
	16XC	1	SEE REF DRWG	ST 273
	17XC	1	SEE REF DRWG	ST 27[illegible]

NO.	DATE	REVISION
3	7-7-69	AS NOTED
2	3-11-69	AS NOTED
1	2-4-69	AS NOTED

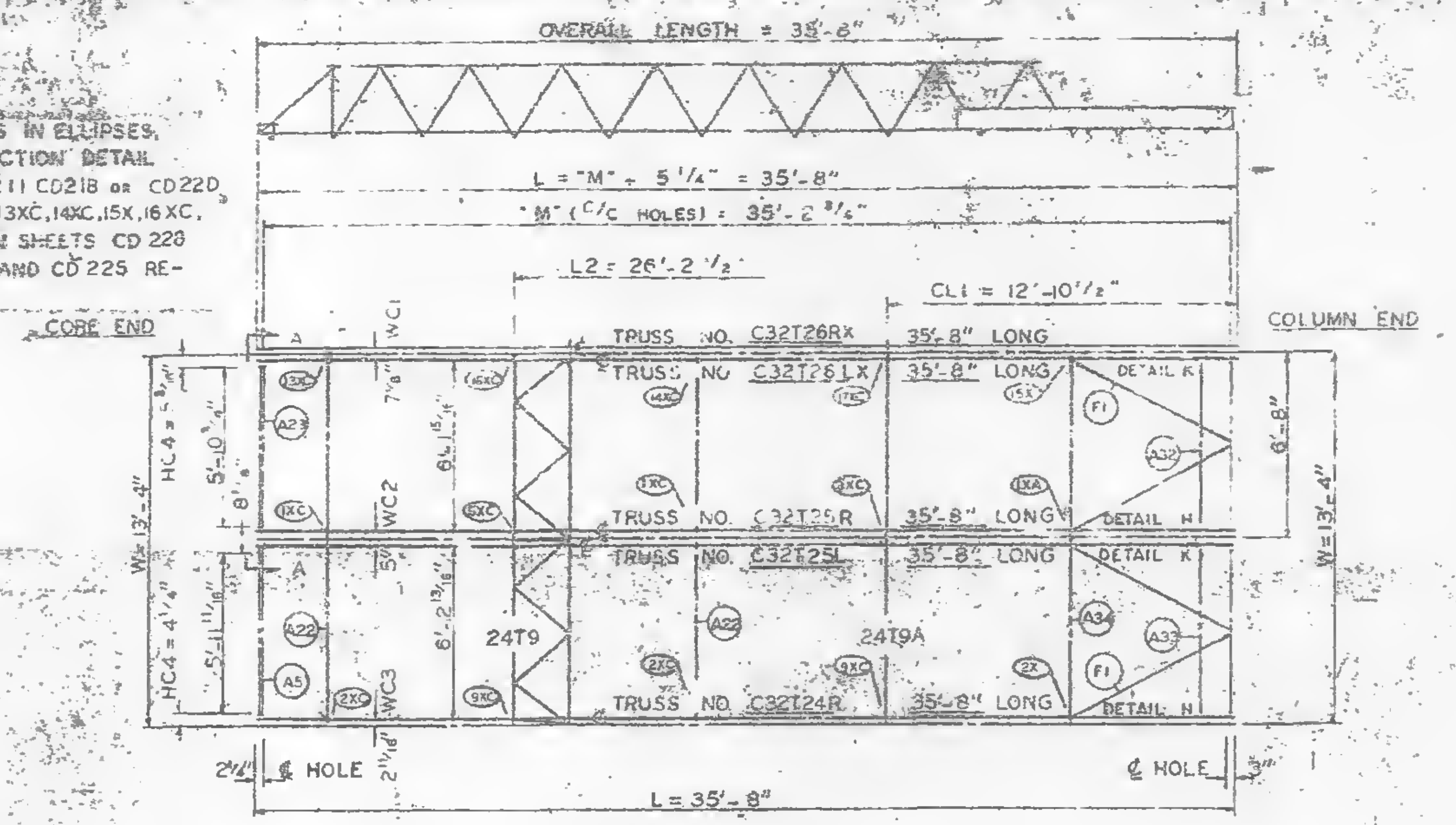
3 REF DRWGS
7-AB4-23 [illegible]
7-AB4-15 & 16 [illegible]
7-AB4-15.2 10-4-68
SA 924 [illegible]
7-AB3-36 10-4-68
7-AB1-22 & 23 10-4-68
7-AB3-47 7-23-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

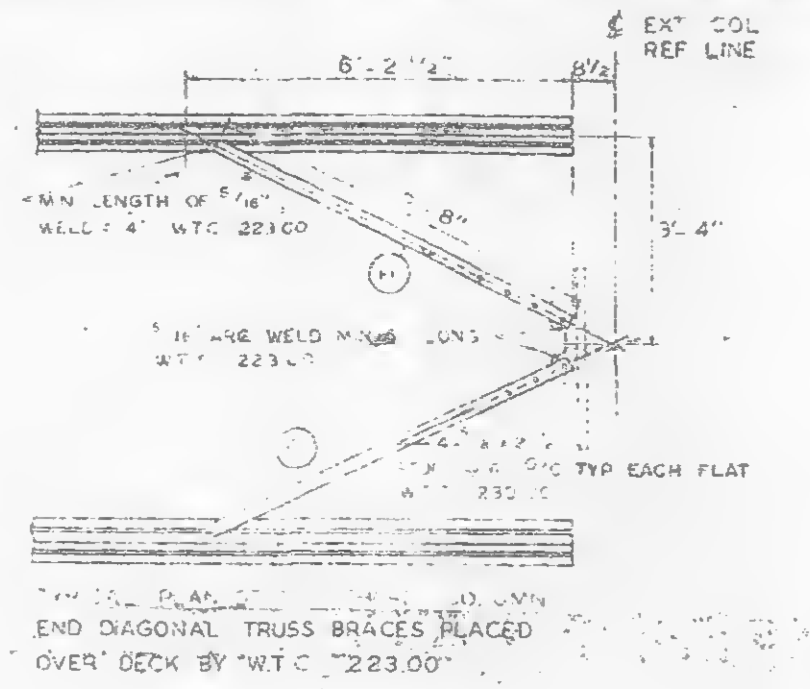
BLDG. A FLOORS 25, 59, 92 (EAST & WEST)
PANEL G2
BLDG. B FLOORS 25, 59, 92

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-36 [illegible]
APPROVED FOR FABRICATION FOR P.A.N.Y.A. DATE [illegible]
DRAWN BY [illegible] DATE JAN [illegible] 1969
APPROVED FOR FABRICATION BY [illegible] DATE
CHECKED BY [illegible] DATE JAN [illegible] 1969
DETAILED BY [illegible]
FABRICATION CONTRACT W.T.C. [illegible]
SHEET [illegible] FD-G2

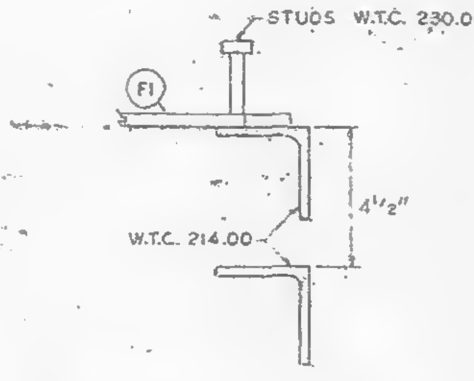
[illegible] AND NUMBERS IN ELLIPSES, [illegible] CONNECTION DETAIL [illegible] CD 211 CD218 or CD220. SPECIAL CONNECTIONS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228 CD 2?6, CD 210, CD 2?7, AND CD 225 RESPECTIVELY.


OVERALL LENGTH = 35'-6"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
L2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T26RX 35'-8" LONG
TRUSS NO. C32T26LX 35'-8" LONG
TRUSS NO. C32T25R 35'-8" LONG
TRUSS NO. C32T25L 35'-8" LONG
TRUSS NO. C32T24R 35'-8" LONG
DETAIL K
DETAIL H
24T9
24T9A
WC1
WC2
WC3
HC4
W = 13'-4"
6'-8"
2 1/4" ℄ HOLE
℄ HOLE 3"
L = 35'-8"
13XC
14XC
15X
16XC
17XC
A2
A5
A22
A23
A32
A33
A34
F1

PANEL GR2 SIZE 13'-4" x 35'-8"



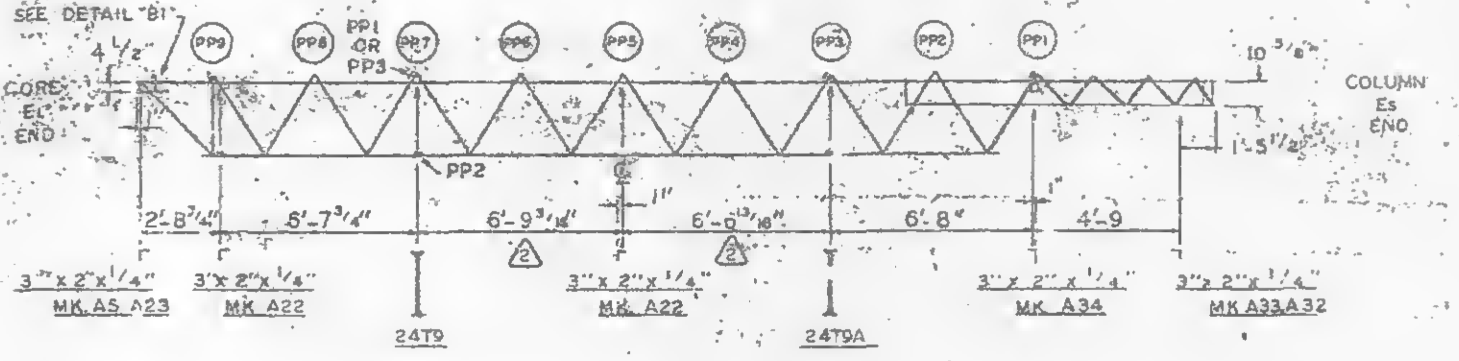
END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



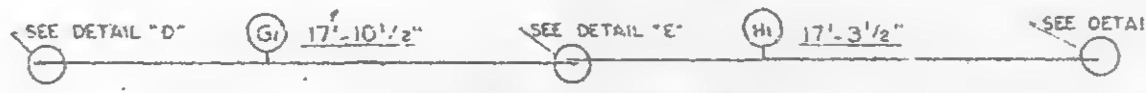
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES ⚠1	T24R	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX	1	C32T26LX x 35'-8	ST 226L
	T26RX	1	C32T26RX x 35'-8	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x [illegible]	[illegible]
	T9A	1	24T9A x 13'-[illegible]	[illegible]
3"x2"x1/4" [illegible]	A5	[illegible]	3"x2"x1/4" x [illegible]	[illegible]
	A[illegible]	[illegible]	[illegible]	[illegible]
	A22	[illegible]	[illegible]	[illegible]
	A23	1	[illegible]	[illegible]
	A32	1	[illegible]	[illegible]
	A34	[illegible]	3"x2"x[illegible]	[illegible]
PATCH PLATES	PP1	1	[illegible]	[illegible]
	PP[illegible]	8	3"x[illegible]	[illegible]
	PP3	[illegible]	2"x[illegible]	[illegible]
COVER PLATES	H	1	9"x.0135"x17'-3 1/2"	ST 304
	H1	1	7"x.0135"x17'-3 1/2"	ST 304
	G	1	9"x.0135"x17'-10 1/2"	ST 303
	G1	1	7"x.0135"x17'-10 1/2"	ST 303
ANGLE CLIPS	C1	8	2"x1 1/2"x.25"x6"	ST 400
#8 SHEAR ANCHOR	SA1	1	#8 REBAR x 0'-7"	ST 400
	SA2	1	#8 REBAR x 0'-9"	ST 400
DIAGONAL FLATS	F1	4	1 1/2"x3/8"x6'-8"	ST 402
CLOSURE PLATES	PF-11	2	3"x1/4"x0'-2 3/4"	ST 410
SPECIAL CONNECTION UNITS	13XC	1	SEE REF DRWG.	ST 2?4
	14XC	1	SEE REF DRWG.	ST 272
	15X	1	SEE REF DRWG	ST 275
	16XC	1	SEE REF. DRWG.	ST 273
	17XC	1	SEE REF. DRWG	ST 271

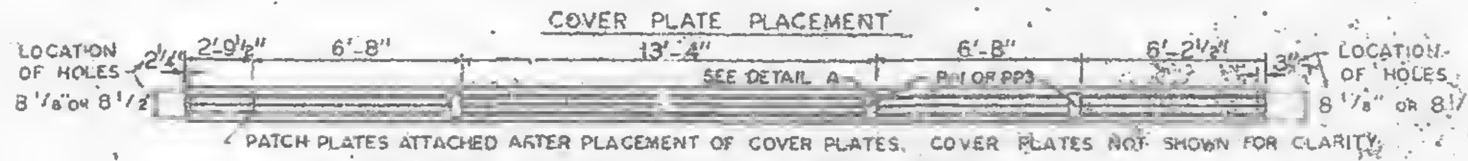
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ OF THE COLUMN CLIPS & BRACES.



PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

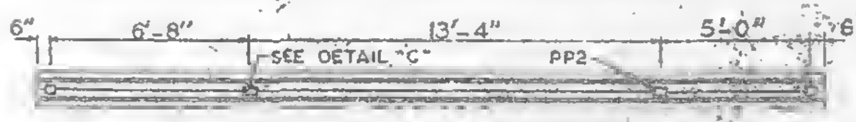


COVER PLATE PLACEMENT



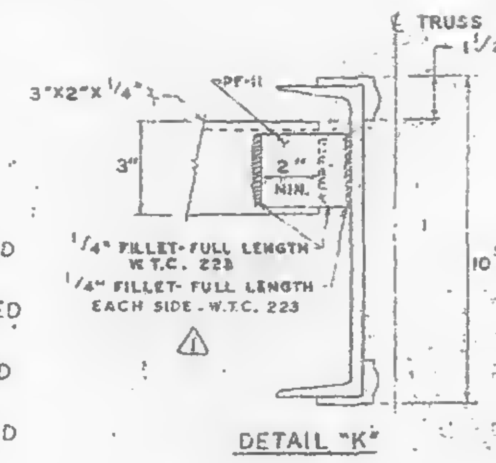
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

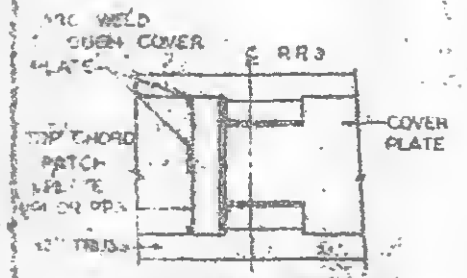

℄ TRUSS
1 1/2"
3"x2"x1/4"
PF-11
3"
2" MIN.
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
10 3/8"
⚠

DETAIL "K"

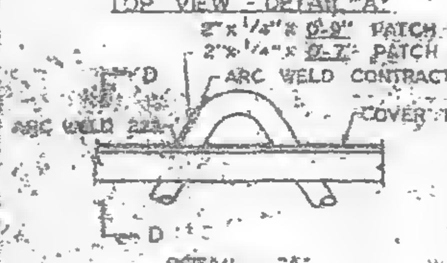
NO.	DATE	REVISION	BY
3	7-7-69	AS NOTED	G.D.C
2	3-11-69	AS NOTED	G.D.C
1	2-4-69	AS NOTED	G.D.C.

3 REF DRWG

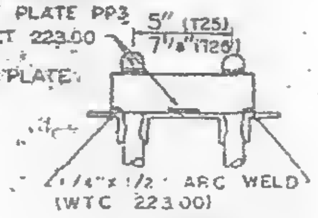
AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-15.2	10-4-68
SA-124	[illegible]-5-69
7-AB3-37	10-4-68
7-AB1-22 & 23	10-4-68
7-AB2-4	7-22-68



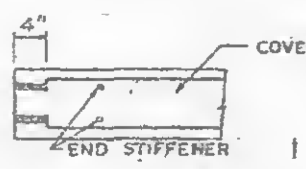
TOP VIEW - DETAIL "A"


2"x1/4"x 0'-9" PATCH PLATE PP1 OR
2"x1/4"x 0'-7" PATCH PLATE PP3
ARC WELD CONTRACT 223.00
ARC WELD 223
COVER PLATE
D
D

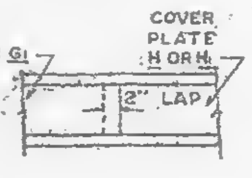
DETAIL "A"



SECTION D-D

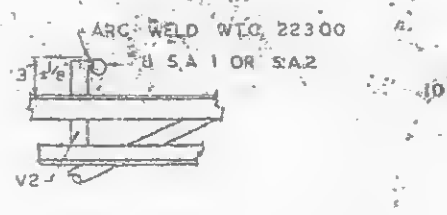


DETAIL "D"

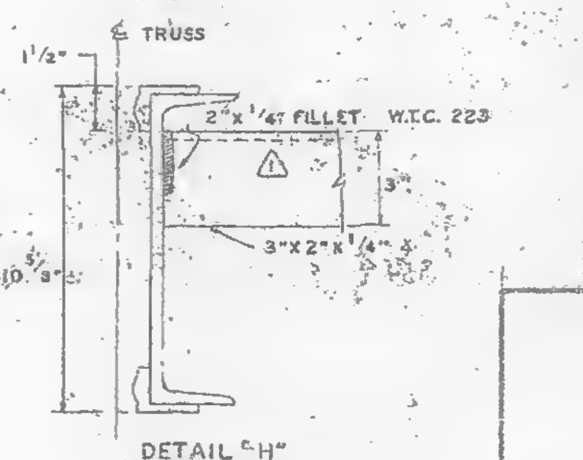


DETAIL "E"

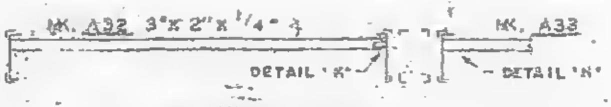
COVER PLATES 29 GA. THICK



DETAIL "B1"

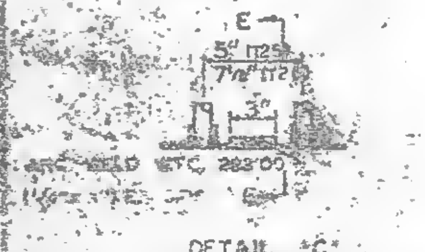


DETAIL "H"

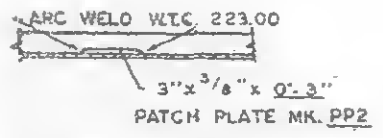


SECTION C-C

END SUPPORT ANGLE

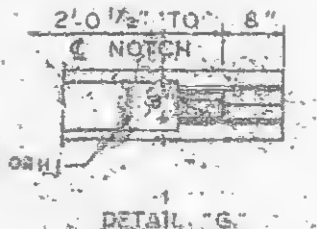


DETAIL "C"

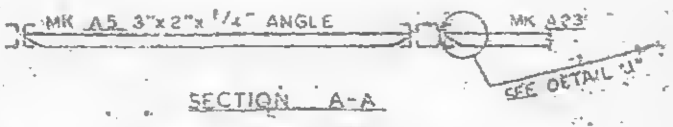


SECTION E-E

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

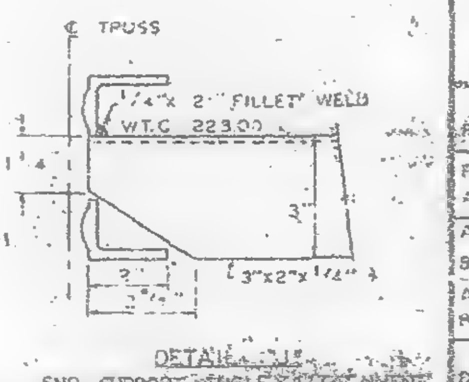


DETAIL "G"



SECTION A-A

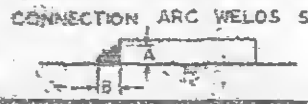
END SUPPORT ANGLES



DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

NOTE: ALL ARC WELDS TO BE MADE WITH LOW-HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/8" & 1" FULL THROAT FILLET.

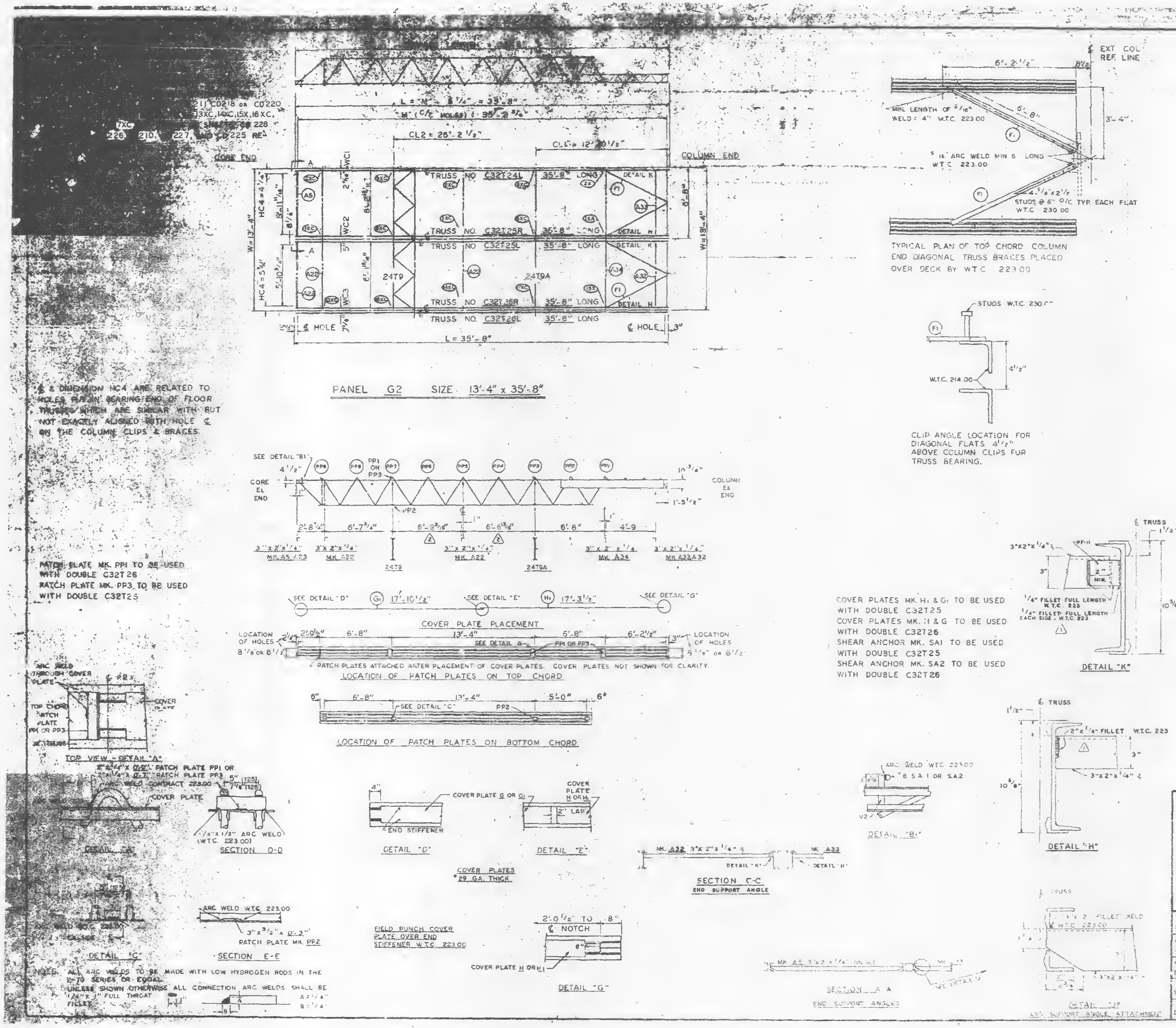


FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92 (EAST & WEST)
PANEL GR2 [illegible] x 35'-8"
BLDG B FLOORS 25, 59 & 92 (NORTH & SOUTH) 2

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-37 10-4-68 PLATE	
APPROVED FOR FABRICATION BY James [illegible] KYA	DATE 1/2/70	DRAWN BY [illegible] DATE JAN 2, 1969	
APPROVED FOR FABRICATION - BY [illegible] FABRICATOR	DATE	CHECKED BY T.B. CHUBA DATE JAN 3, 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-GR2

LACLEDE STEEL CO.


PANEL G2 SIZE 13'-4" x 35'-8"
TRUSS NO. C32T24L 35'-8" LONG
TRUSS NO. C32T25R 35'-8" LONG
TRUSS NO. C32T25L 35'-8" LONG
TRUSS NO. C32T26R 35'-8" LONG
TRUSS NO. C32T26L 35'-8" LONG
DETAIL K
DETAIL H
CORE END
COLUMN END
L = 35'-8"
CL2 = 26'-2 1/2"
W = 13'-4"
24T9
24T9A
EXT. COL. REF. LINE
6'-2 1/2"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223.00
5/16 ARC WELD MIN 6 LONG W.T.C. 223.00
STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
CORE EL END
COLUMN EL END
3"x2"x1/4" MK. A5 A23
3"x2"x1/4" MK. A22
3"x2"x1/4" MK. A22
3"x2"x1/4" MK. A34
3"x2"x1/4" MK. A33 A32
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
17'-10 1/2"
17'-3 1/2"
LOCATION OF HOLES 8 1/8" OR 8 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
TOP VIEW - DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES #29 GA. THICK
DETAIL "G"
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
SECTION C-C END SUPPORT ANGLE
DETAIL "C"
ARC WELD W.T.C. 223.00
3"x3/8"x 0'-3"
PATCH PLATE MK. PP2
SECTION E-E
DETAIL "K"
DETAIL "H"
DETAIL "B"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
1/4" FILLET FULL LENGTH W.T.C. 223
2"x1/4" FILLET W.T.C. 223
3"x2"x1/4"
10 5/8"

& DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x 2"x 1/4" ANGLE	A5	1	3"x 2"x 1/4"x 6'-1 13/16"	ST 403
	A22	2	3"x 2"x 1/4"x 1'-7 1/2"	ST 403
	A23	1	3"x 2"x 1/4"x 6'-[illegible]	ST 405
	A32	1	3"x 2"x 1/4"x 5'-4 1/2"	ST 410
	A33		3"x 2"x 1/4"x 5'-10 1/2"	ST 410
	A34	1	3"x 2"x 1/4"x 13'-8 [illegible]/16	[illegible]
PATCH PLATES	PP1	4	2"x 1/4"x 0'-9"	ST 40[illegible]
	PP2	8	3"x 3/8"x 0'-3"	ST 40[illegible]
	PP3	[illegible]	2"x 1/4"x 0'-7"	ST 40[illegible]
COVER PLATES	H	[illegible]	9"x .0135"x 17'-3 1/2"	[illegible]
	H1	1	7"x .0135"x 17'-3 1/2"	[illegible]
	G	1	9"x .0135"x 17'-10 1/2"	[illegible]
	G1	1	7"x .0135"x 17'-10 1/2"	[illegible]
ANGLE CLIPS	C1	8	2"x 1 1/2"x .25"x 6"	ST 400
#8 SHEAR ANCHOR	SA1	1	#8 REBAR x 0'-7"	[illegible]
	SA2	1	#8 REBAR x 0'-9	ST 40[illegible]
DIAGONAL FLATS	F1	4	[illegible] x 3/8"x 6'-8	ST 40[illegible]
CLOSURE PLATES	PF-H	2	3"x 1/4"x 0'-2 [illegible]"	[illegible]
SPECIAL CONNECTION UNITS	13XC	1	SEE REF DRWG	[illegible]
	14XC	[illegible]	SEE REF DRWG	[illegible]
	15X	1	SEE REF DRWG	ST 275
	16XC	[illegible]	SEE REF DRWG	ST 27[illegible]
	17XC	1	SEE REF DRWG	[illegible]

NO.	DATE	REVISION	BY
△3	7-7-69	AS NOTED	G.D.C.
△2	3-11-69	AS NOTED	G.D.C.
△1	2-4-69	AS NOTED	G.D.C.

△3 REF DRWG

[illegible]	10-[illegible]
[illegible]	7-22-69
[illegible] 15,2	10-4-[illegible]
[illegible]	1-6-69
[illegible] 36	10-4-68
[illegible] 22 & 23	10-4-68
[illegible] 4	7-22-[illegible]

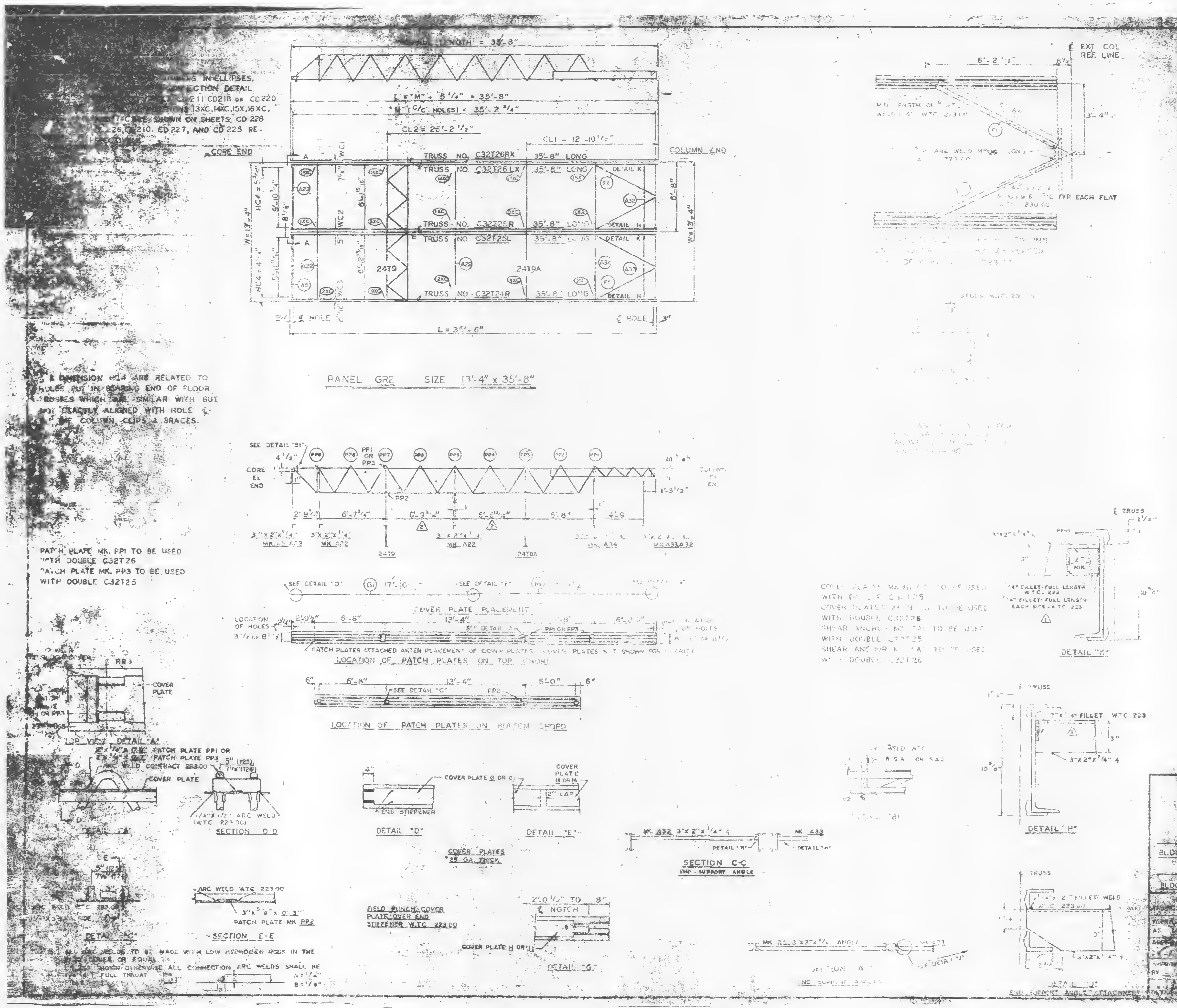
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92 (EAST & WEST)
PANEL G2 [illegible] x 35'-8"
BLDG. B FLOORS 25, 59 & 92 △2

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWINGS NO. 7-AB3 36 10-4-68 PLATE	
APPROVED FOR FABRICATION BY James White FOR PONYA	DATE 1/2/70	DRAWN BY [illegible] DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JAN. 7, 1969	
DETAILED BY A.C. [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-G2

[illegible] IN ELLIPSES, [illegible] CONNECTION DETAIL [illegible] 211 CD218 or CD220 [illegible] 13XC, 14XC, 15X, 16XC, [illegible] ARE SHOWN ON SHEETS CD 228 [illegible] 26, CD210, CD 227, AND CD 225 RESPECTIVELY.



[illegible] & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ OF THE COLUMN CLIPS & BRACES.

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26

PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

COVER PLATES MK. [illegible] TO BE USED WITH [illegible] C32T25

COVER PLATES MK. [illegible] TO BE USED WITH DOUBLE C32T26

SHEAR ANCHOR MK. [illegible] TO BE USED WITH DOUBLE C32T25

SHEAR ANCHOR MK. [illegible] TO BE USED WITH DOUBLE C32T26

[illegible] ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] SERIES, OR EQUAL.

[illegible] SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT

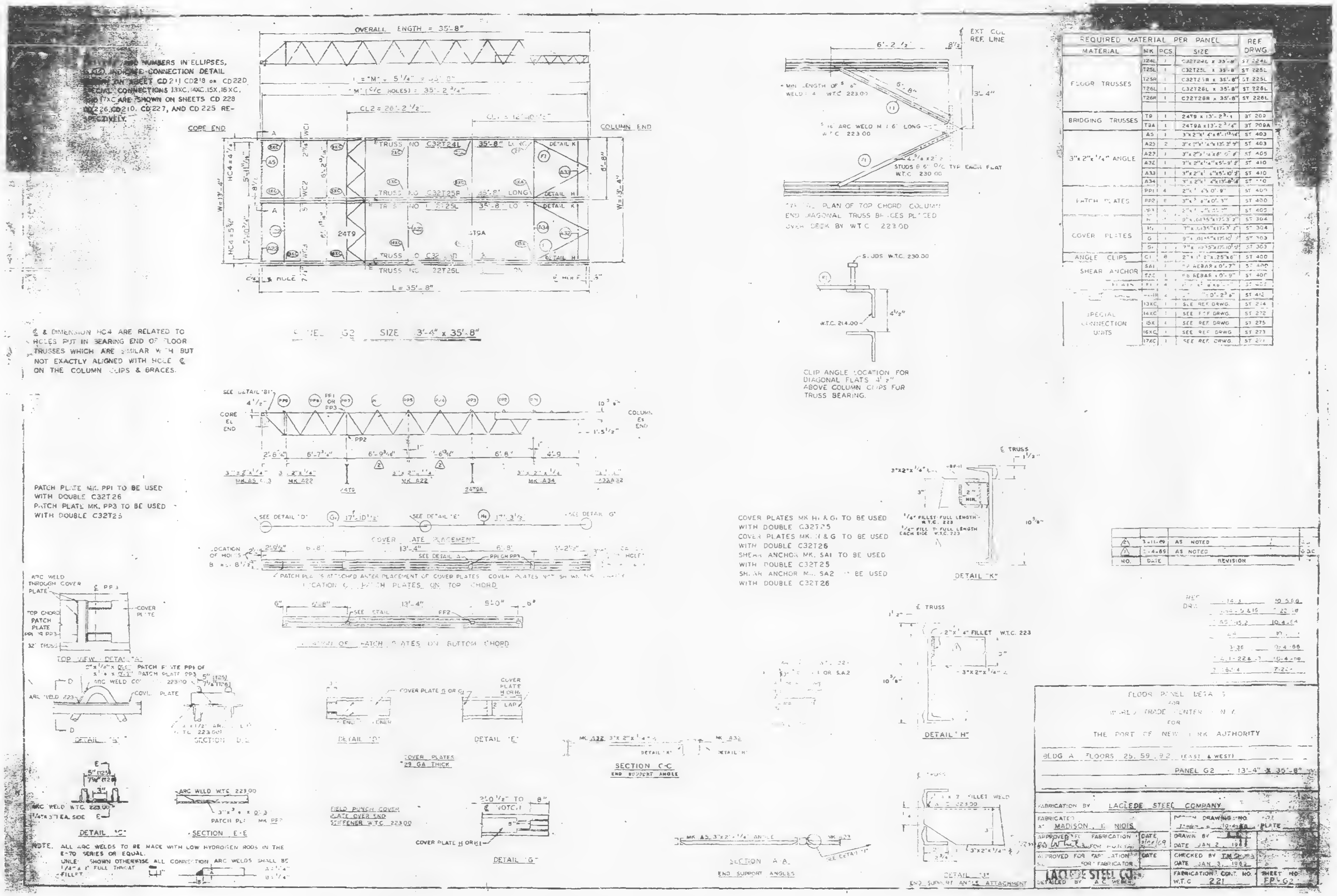
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES △1	T24R	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX	1	C32T26LX x 35'-8"	ST 226L
	T26RX	1	C32T26RX x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x2"x1/4" ANGLE	A5	1	3"x2"x1/4"x8'-1 13/16"	ST 403
	A22	2	3"x2"x1/4"x12'-3 1/2"	ST 403
	A23	1	3"x2"x1/4"x6'-5 7/8"	ST 405
	A32	1	3"x2"x1/4"x5'-9 1/2"	ST 410
	A33	1	3"x2"x1/4"x5'-10 1/2"	ST 410
	A34	1	3"x2"x1/4"x13'-8 3/16"	ST 410
PATCH PLATES	PP1	4	2"x1/4"x0'-8"	ST 400
	PP2	8	3"x3/8"x0'-3"	ST 400
	PP3	4	2"x1/4"x0'-7"	ST 400
COVER PLATES	H	1	9"x.0135"x17'-3 1/2"	ST 304
	H1	1	7"x.0135"x17'-3 1/2"	ST 304
	G	1	9"x.0135"x17'-10 1/2"	ST 303
	G1	1	7"x.0135"x17'-10 1/2"	ST 303
ANGLE CLIPS	C1	8	2"x1 1/2"x.75"x6"	ST 400
#8 SHEAR ANCHOR	SA1	1	#8 REBAR x 0'-7"	ST 400
	SA2	[illegible]	#8 REBAR x 0'-8"	ST 400
DIAGONAL FLATS	F1	4	1 1/2"x3/8"x6'-8"	ST 402
CLOSURE PLATES	PF-1	[illegible]	3"x1/4"x0'-2 3/8"	ST 412
SPECIAL CONNECTION UNITS	13XC	1	SEE REF. DRWG.	ST 274
	14XC	1	SEE REF. DRWG.	ST 272
	15X	1	SEE REF. DRWG.	ST 275
	16XC	1	SEE REF. DRWG.	ST 273
	17XC	1	SEE REF. DRWG.	ST 271

[illegible]	7-7-69	AS NOTED	G.D.C.
2	3-11-69	AS NOTED	G.D.C.
[illegible]	2-4-69	AS NOTED	G.D.C.
NO.	DATE	REVISION	BY

△1 REF. DRWG.

[illegible]	10-15-68
7-A34 [illegible]	7-22-68
[illegible]	10-4-68
[illegible]	1-6-69
[illegible]-137	10-4-68
[illegible]	10-4-68
7-A32-4	7-22-68

FLOOR [illegible]
FOR
WORLD [illegible]
THE PORT OF [illegible]
BLDG. A FLOORS 25, 59, 92 (EAST & WEST)
BLDG. B FLOORS 25, 59 & 92 [illegible]
FABRICATED BY [illegible]
AT [illegible]
APPROVED [illegible]
JAN 2 1969
BY
JAN 3 1969



NUMBERS IN ELLIPSES, INDICATE CONNECTION DETAIL ON SHEET CD 211 CD218 OR CD220. SPECIAL CONNECTIONS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228, CD226, CD210, CD227, AND CD 225 RESPECTIVELY.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL G2 SIZE 13'-4" x 35'-8"

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

PARTIAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

COVER PLATES MK H₁ & G₁ TO BE USED WITH DOUBLE C32T25
COVER PLATES MK H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x 2"x 1/4" ANGLE	A5	1	3"x 2"x 1/4"x 6'-1 13/16"	ST 403
	A23	2	3"x 2"x 1/4"x 12'-3 1/2"	ST 403
	A27	1	3"x 2"x 1/4"x 6'-0"	ST 405
	A32	1	3"x 2"x 1/4"x 5'-9 1/2"	ST 410
	A33	1	3"x 2"x 1/4"x 5'-10 1/2"	ST 410
	A34	1	3"x 2"x 1/4"x 13'-8 3/4"	ST 410
PATCH PLATES	PP1	4	2"x 1/4"x 0'-9"	ST 400
	PP2	6	3"x 3/8"x 0'-3"	ST 400
	PP3	4	[illegible]	ST 400
COVER PLATES	H	1	9"x .0135"x 17'-3 1/2"	ST 304
	H₁	1	7"x .0135"x 17'-3 1/2"	ST 304
	G	1	9"x .0135"x 17'-10 1/2"	ST 303
	G₁	1	7"x .0135"x 17'-10 1/2"	ST 303
ANGLE CLIPS	C1	8	2"x 1 1/2"x .25"x 6"	ST 400
SHEAR ANCHOR	SA1	1	#2 REBAR x 0'-7"	ST 400
	SA2	1	#5 REBAR x 0'-9"	ST 400
FLATS	F1	4	[illegible]	ST 402
[illegible]	[illegible]	2	[illegible] x 0'-2 3/4"	ST 412
SPECIAL CONNECTION UNITS	13XC	1	SEE REF DRWG.	ST 274
	14XC	1	SEE REF DRWG.	ST 272
	15X	1	SEE REF DRWG.	ST 275
	16XC	1	SEE REF DRWG.	ST 273
	17XC	1	SEE REF DRWG.	ST 271

NO.	DATE	REVISION
2	3-11-69	AS NOTED
1	2-4-69	AS NOTED

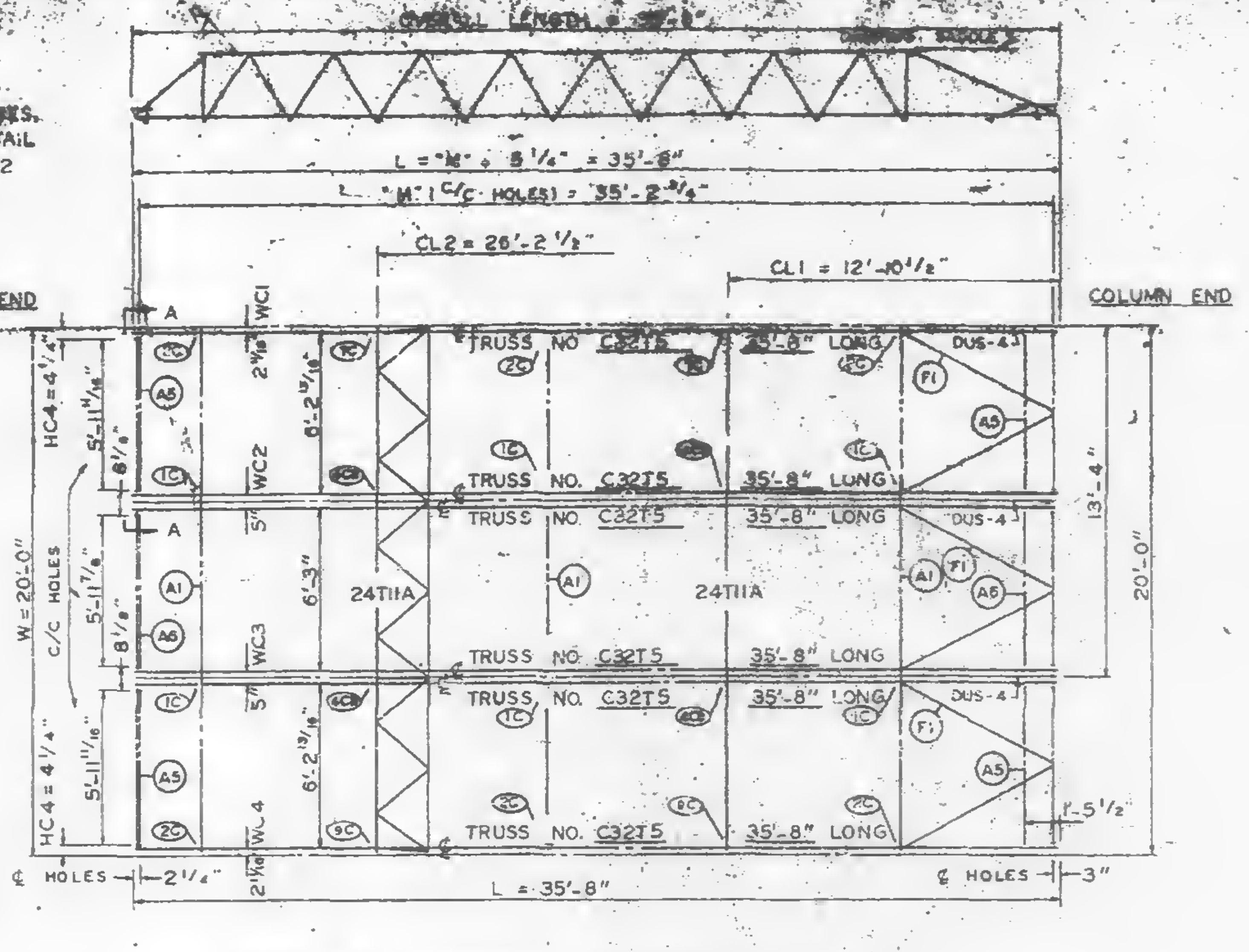
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92 (EAST & WEST)

PANEL G2 13'-4" x 35'-8"

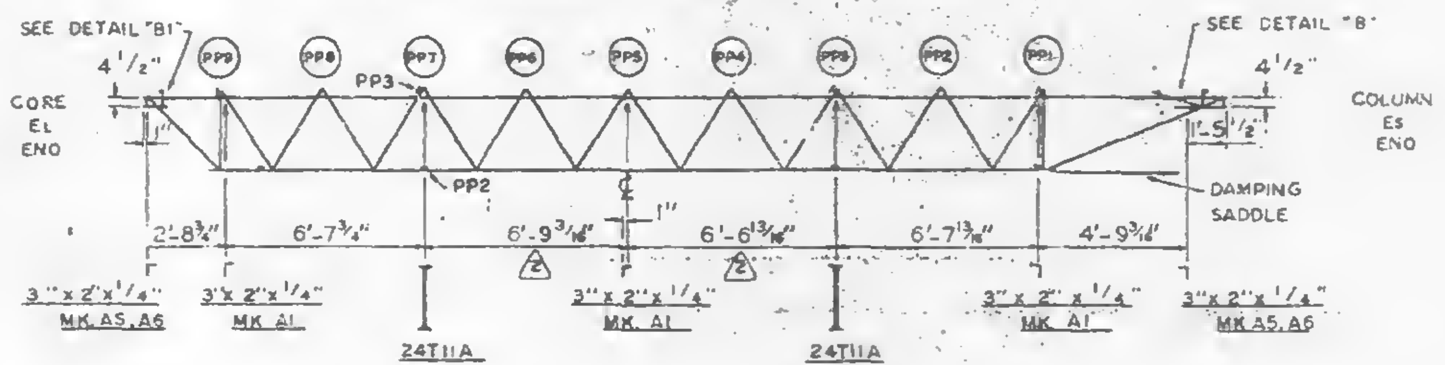
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO.	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PORT AUTH.	DATE 3/24/69	DRAWN BY DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. OHURA DATE JAN 3, 1969	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-G2

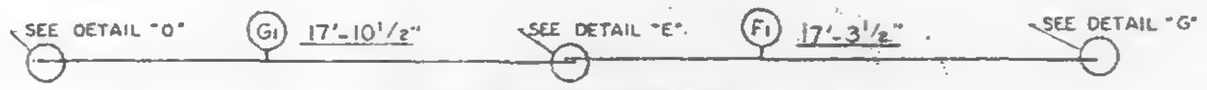
[illegible] IN ELLIPSES.
[illegible] CONNECTION DETAIL
[illegible] SHEET CD 201, CD 202



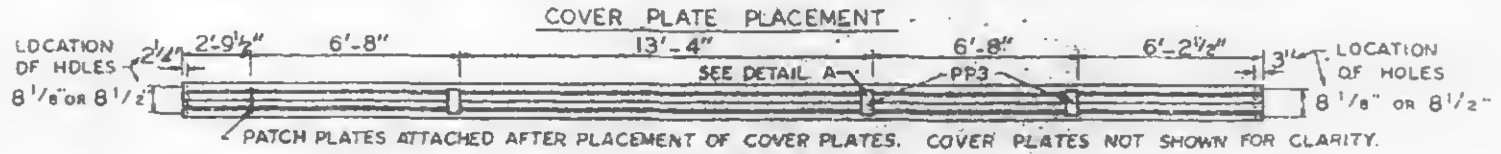
PANEL NO. H1 SIZE 20'-0" x 35'-8"

¢ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES.



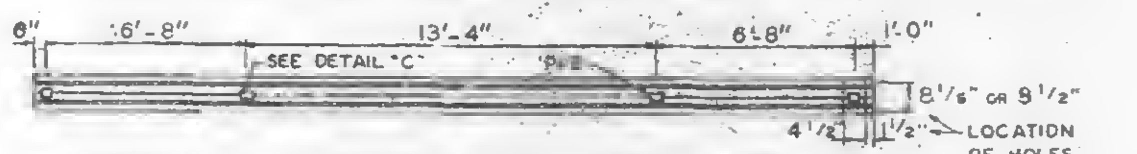


COVER PLATE PLACEMENT

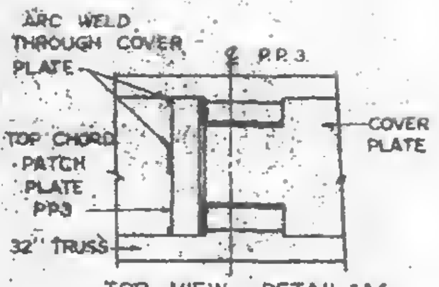


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

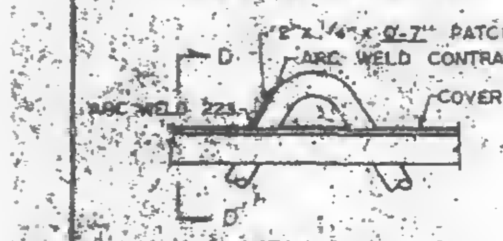
LOCATION OF PATCH PLATES ON TOP CHORD



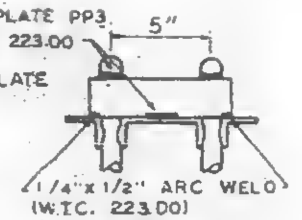
LOCATION OF PATCH PLATES ON BOTTOM CHORD



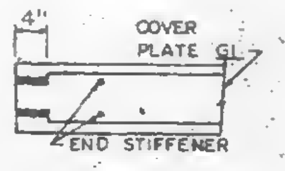
TOP VIEW - DETAIL "A"



DETAIL "A"

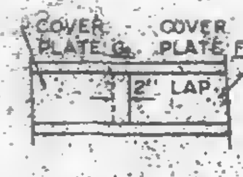


SECTION D-D

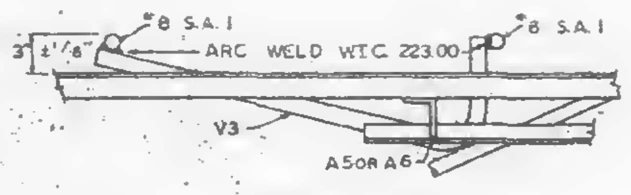


DETAIL "D"

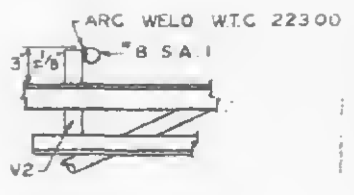
COVER PLATES 29 GA. THICK



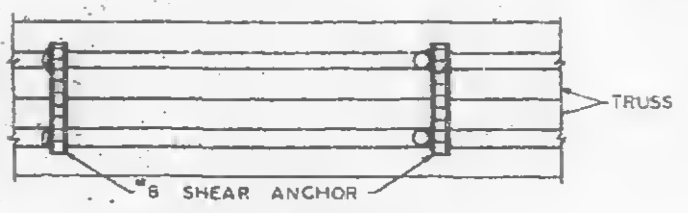
DETAIL "E"



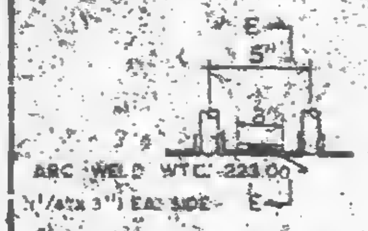
DETAIL "B"



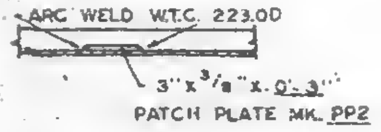
DETAIL "B1"



TOP VIEW - DETAIL "B"

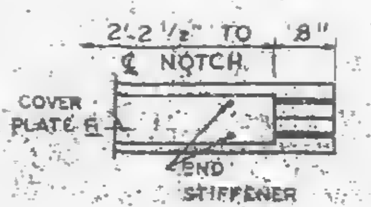


DETAIL "C"

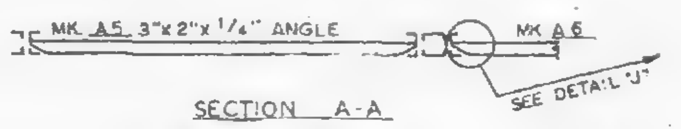


SECTION E-E

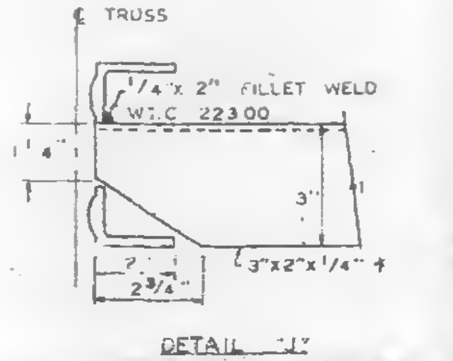
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



DETAIL "G"

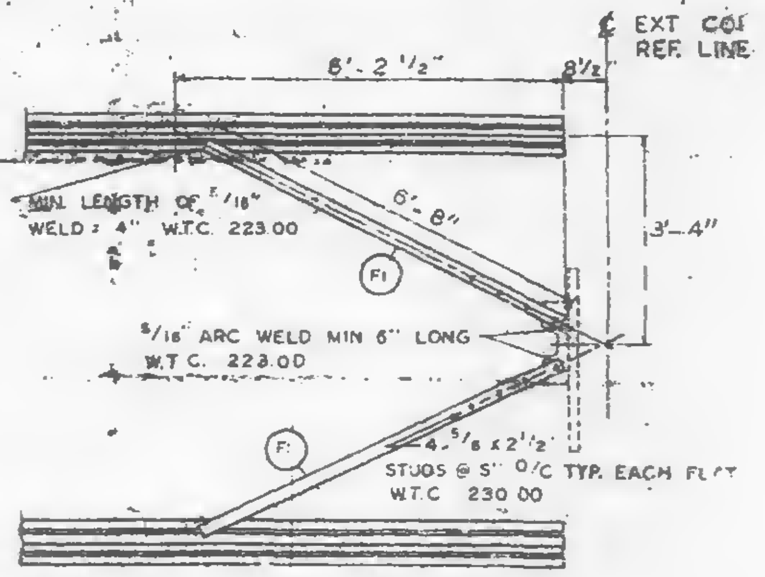


SECTION A-A
END SUPPORT ANGLES

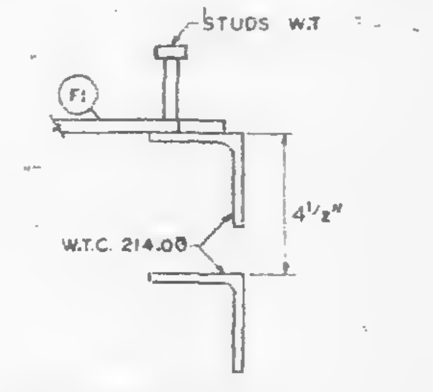


DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"


¢ EXT COL REF. LINE
8'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
6'-8"
F1
3'-4"
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
4-5/8 x 2 1/2" STUDS @ 5" O/C TYP. EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-1"	ST211A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19	ST403
	A5	4	3" x 2" x 1/4" x 0'-4 13/16"	ST403
	A6	2	3" x 2" x 1/4" x 0'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-[illegible]"	ST402
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7	ST400
	PP2	12	3" x 3/8" x 0'-3"	ST400
COVER PLATES	G1	3	7" x 0.135" x 17'-10 1/2"	ST303
	F1	3	7" x 0.135" x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST400
DAMPING SADDLE ⚠1	DUS-4	3	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST299
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST400
CONNECTION PLATES ⚠1	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST400
	P2	2	4 1/2" x .39" x 0'-9"	ST400
	P7	2	6 1/2" x 1/2" x 1'-0"	ST401

NO.	DATE	REVISION	BY
3	6-23-69	AS NOTED	G.D.C.
2	2-21-69	AS NOTED	G.D.C.
1	10-16-68	MATERIAL LIST	G.D.C.

⚠3 REF DRWG

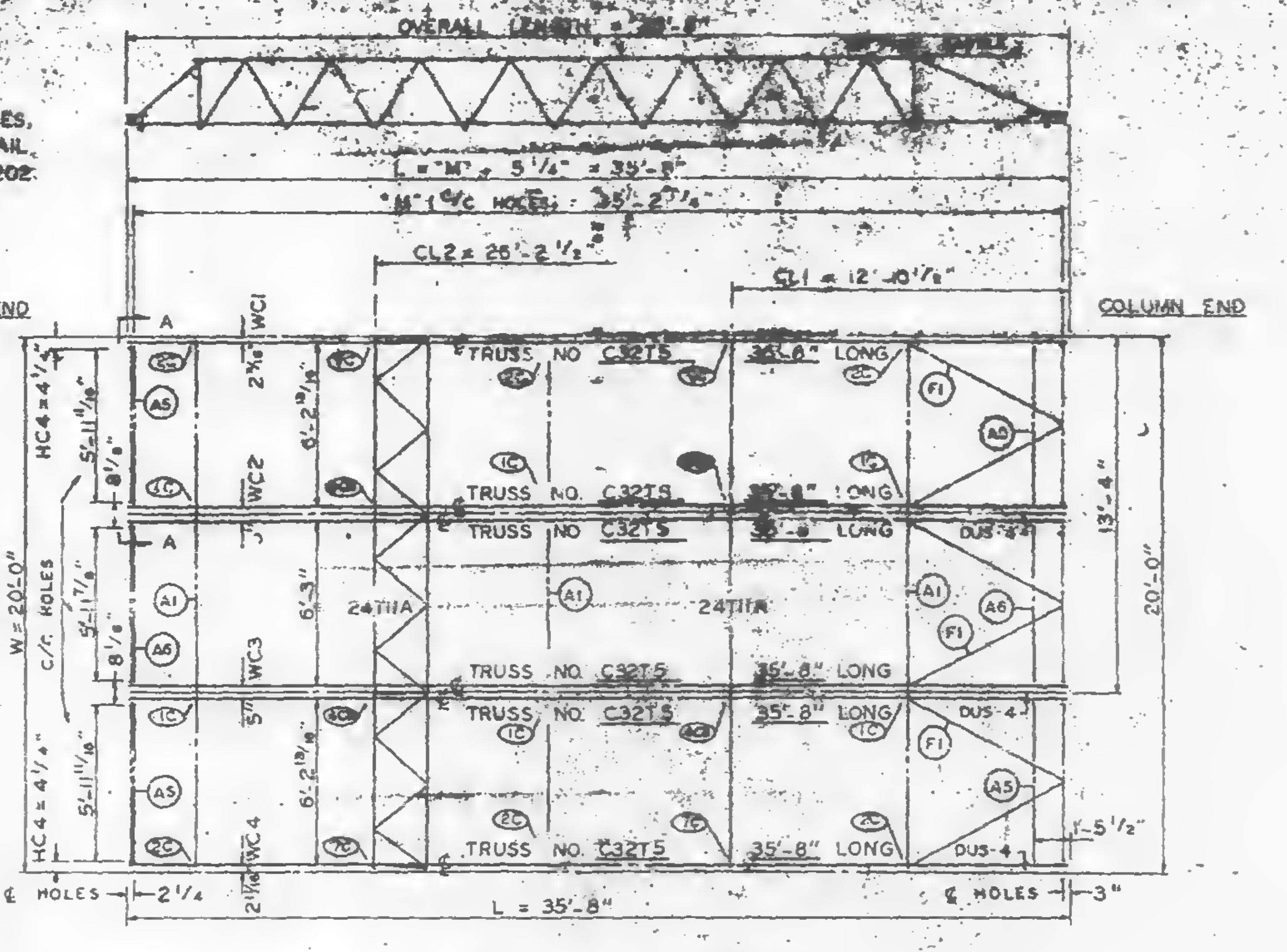
7-AB4-3,1	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-6	7-22-68
7-AB4-42 & 3	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66 68-74, 84-91 &
93-106 (E & W) 45-49 (W) 80-83 (E) PANEL H1 [illegible]0" x 35'-8"
⚠3 BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-106 (N & S) 45-49 (S) 80-83 (N)

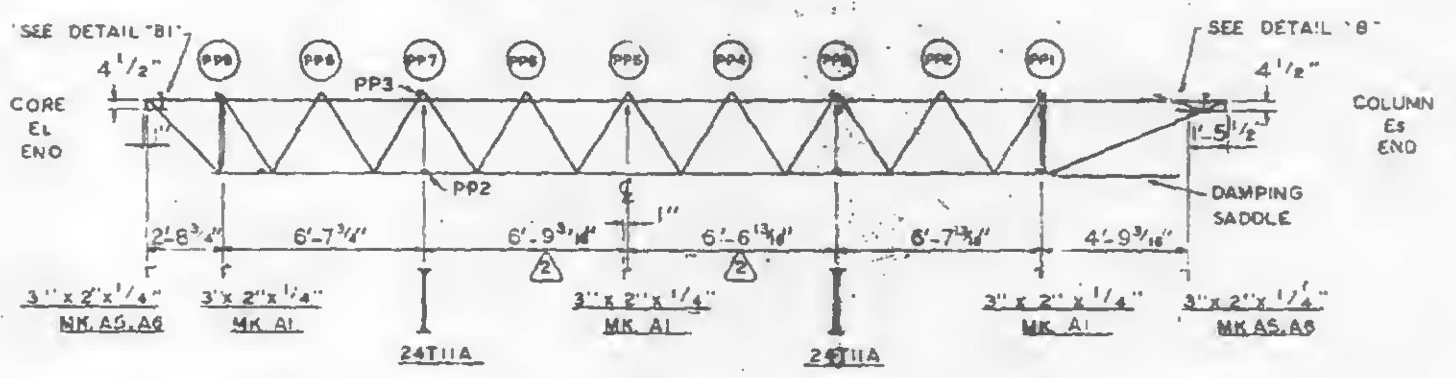
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-17
PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A.
DATE 1/2/70
DRAWN BY
DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR
LACLEDE STEEL CO.
DATE
CHECKED BY T.M. CHURA
DATE APRIL 10, 1968
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-H1

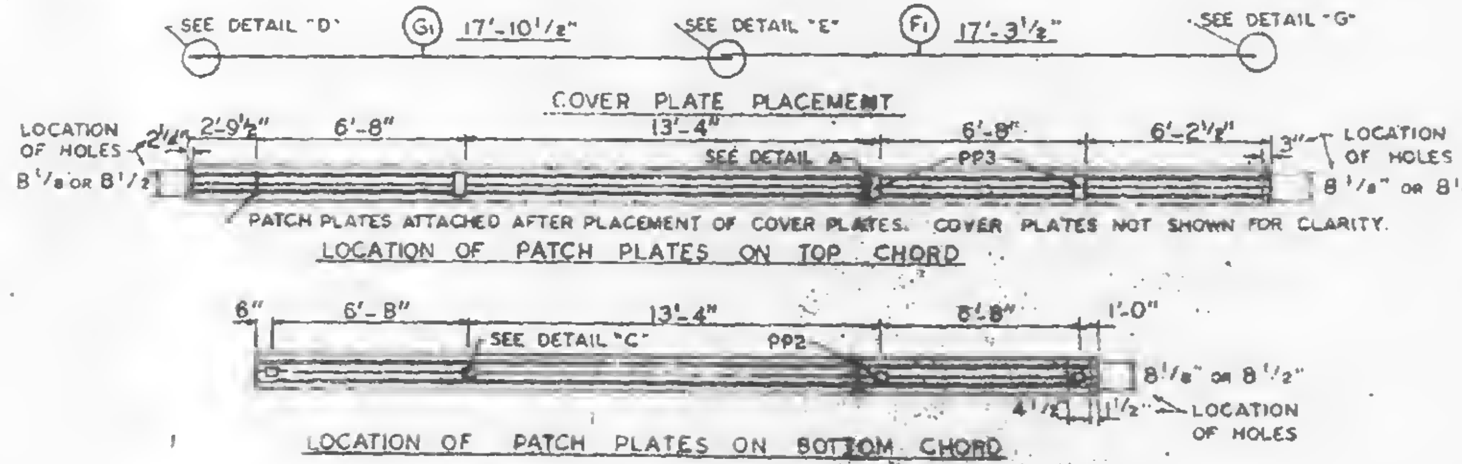
LETTERS AND NUMBERS IN ELLIPSES, INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



PANEL NO. HR1 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

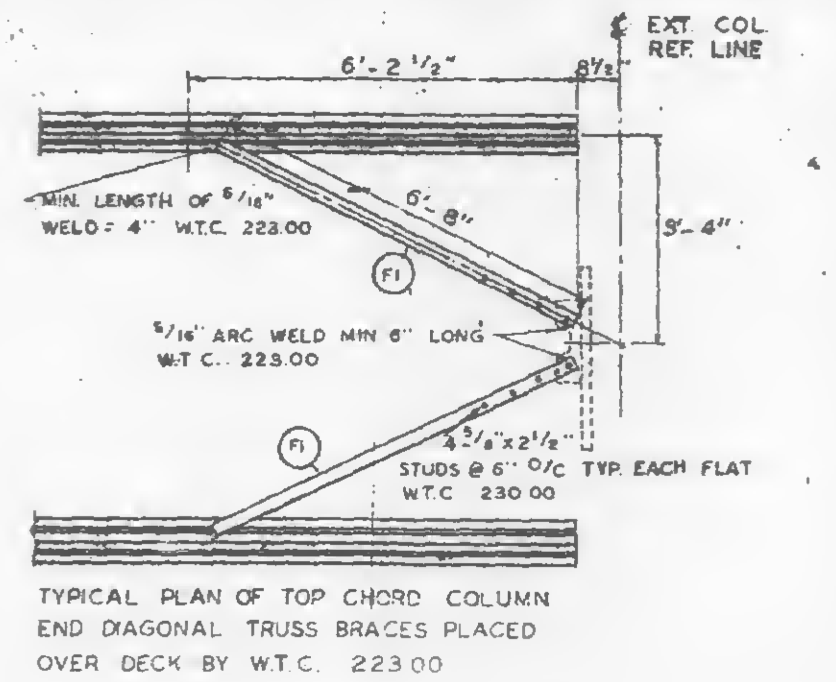




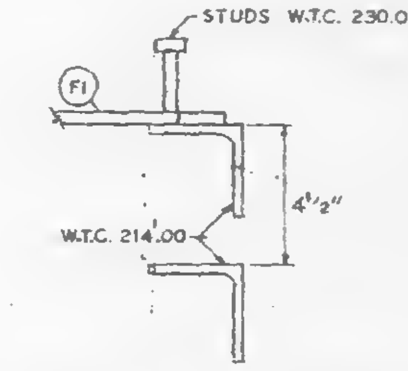
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

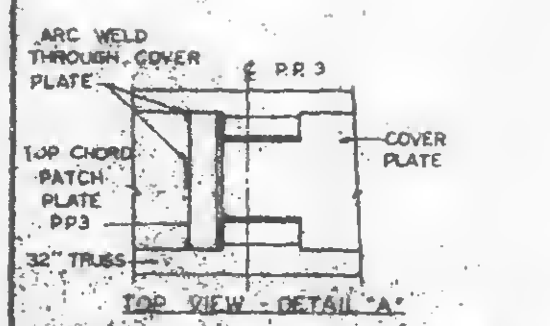
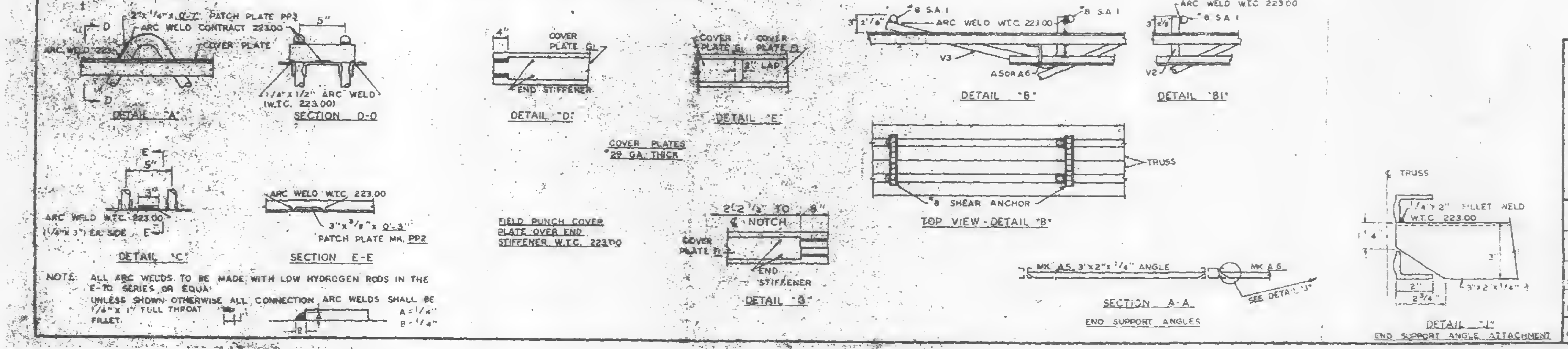
LOCATION OF PATCH PLATES ON BOTTOM CHORD


EXT COL REF LINE
6'-2 1/2"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
4-3/8" x 2 1/2"
STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
F1

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T5	6	C32T 35'-8"	ST295
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST 403
	A5	4	3" x 3" x 1/4" x 6'-4 7/16"	ST 403
	A6	2	3" x 2" x 1/4" x 6'-2"	ST 403
DIAGONAL FLATS	1	6	1" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	3	7" x 0.135" x 17'-0 1/2"	ST 303
	F1	3	7" x 0.135" x 7'-3 1/2"	ST 303
ANGLE CLIPS	2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3 1/2 x 3 1/2 x 3/8" x 3-6 7/8	ST 296
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	F2	2	4 1/2" x .39" x 0'-9"	ST 400
⚠	P7	2	6 1/2" x 1/2" x 1'-0"	ST 401

NO	DATE	REVISION	BY
3	6-23-69	AS NOTED	G.D.C.
2	2-21-69	AS NOTED	G.D.C.
1	10-16-68	LIST OF MATERIAL	G.D.C.

REF DRWG	
7-AB4-3.1	1-3-68
7-AB4-5 & 16	7-22-68
7-AB4-39-41	1-3-68
③ SA-124	1-6-69
7-A53-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-6	7-22-68
7-AB4-42 & 3	10-15-68

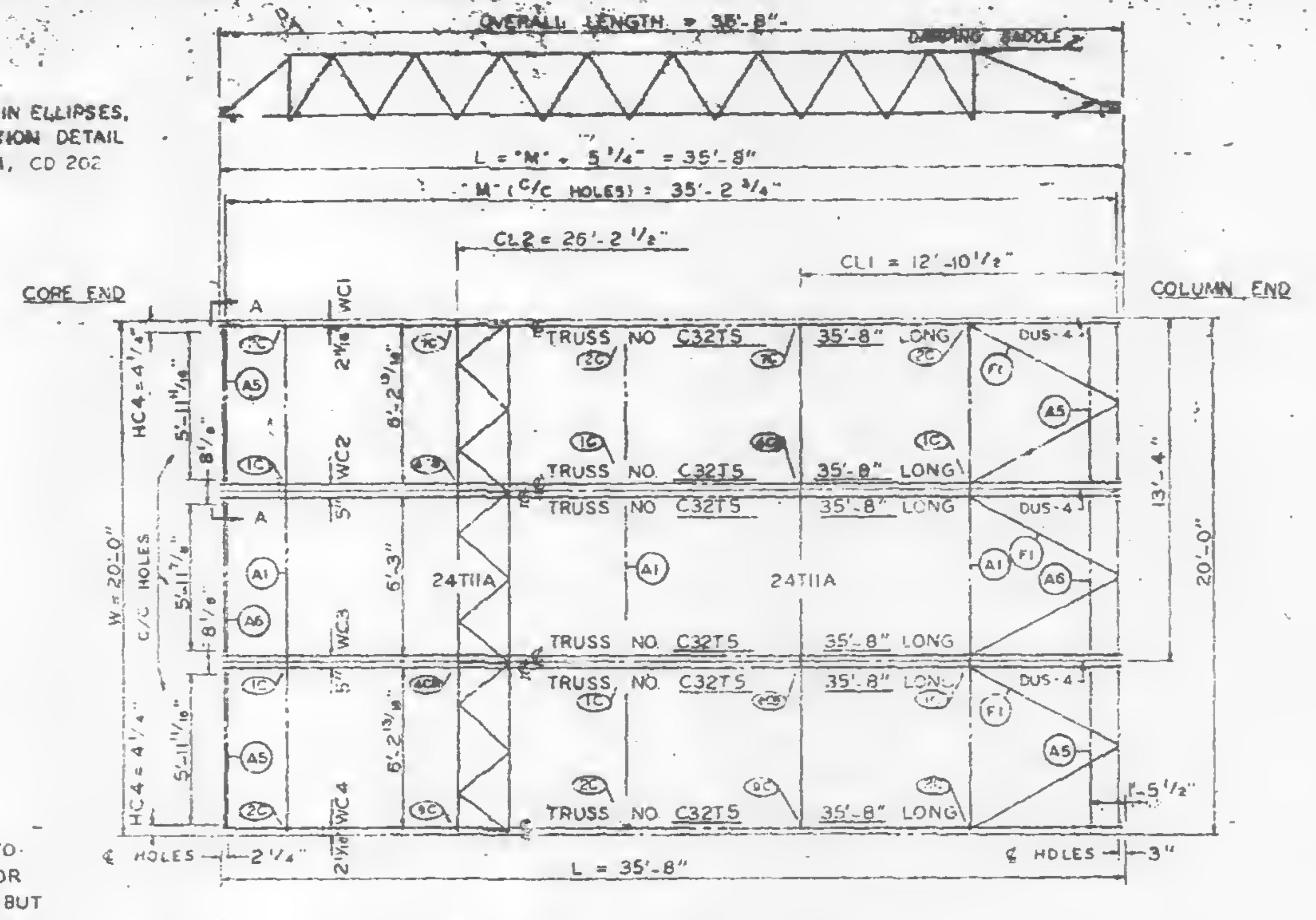
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40 (EAST & WEST) 41-49, 50 50, 60-66, 68-74 (EAST)
PANEL HR1 20'-0" x 35'-8"
BLDG. B FLOORS 14-24, 26-40 (NORTH & SOUTH) 45-56, 60-74 (NORTH) ③

FABRICATION BY LACLEDE STEEL COMPANY

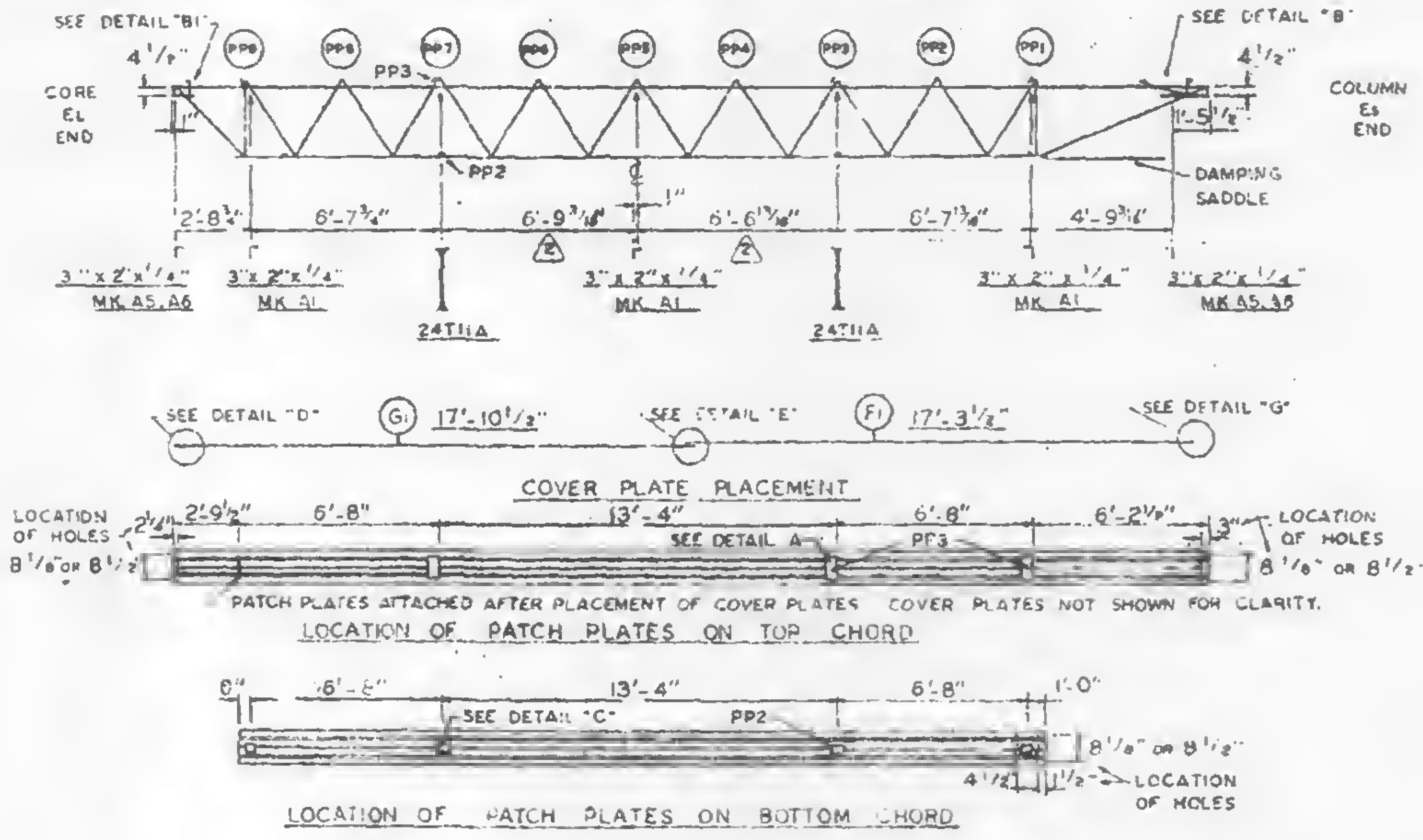
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-18	PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A.	DATE 1/2/70	DRAWN BY [illegible] DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY I.M. CHURA DATE APRIL 10, 1968	
DETAILED BY [illegible]		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-HR1

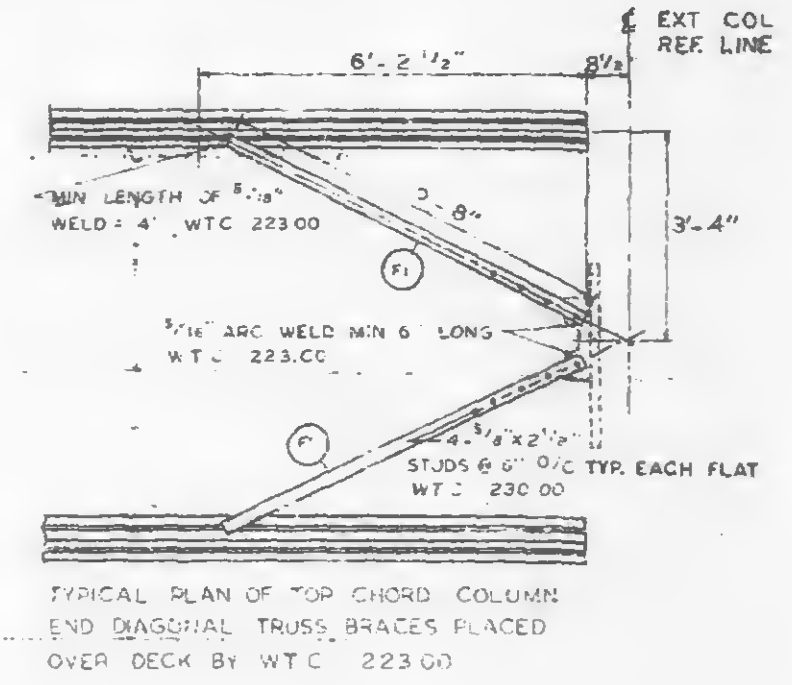
LETTERS AND NUMBERS IN ELLIPSES, INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD 202 OR CD 203.



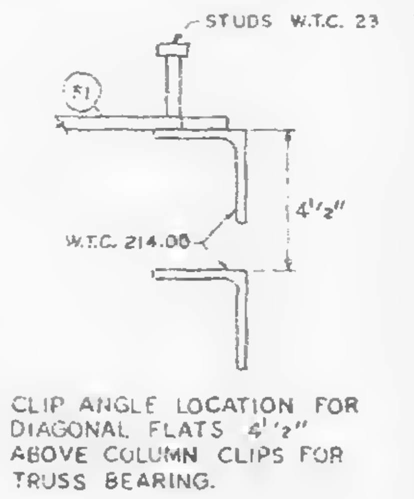
PANEL NO. H1 SIZE 20'-0" x 35'-8"

¢ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES.



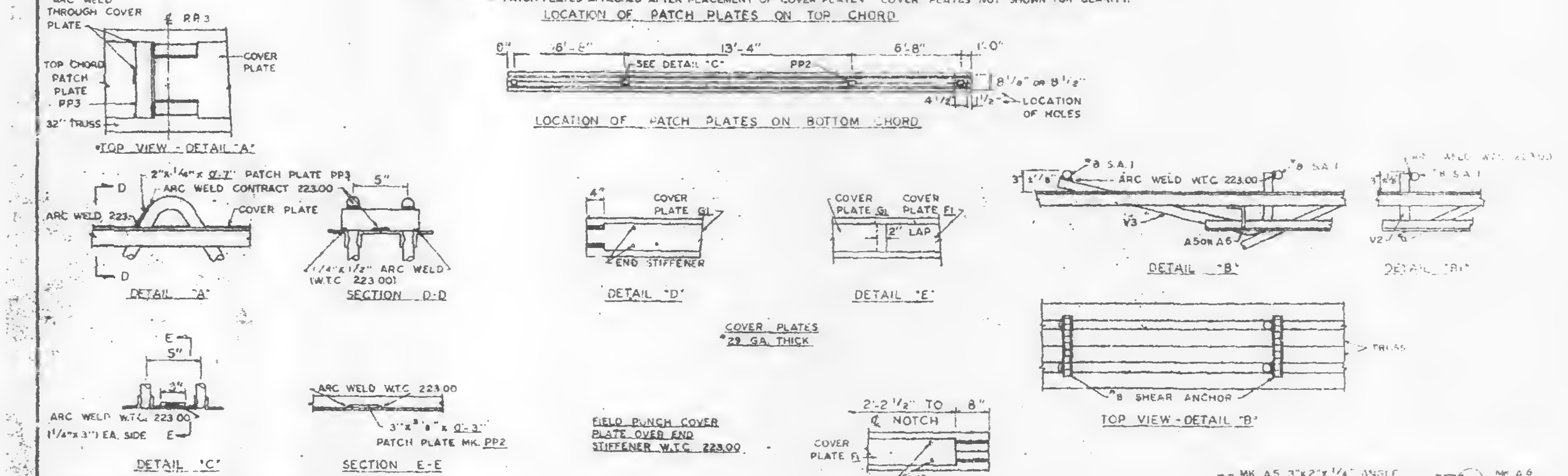

EXT COL REF LINE
6'-2 1/2"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
4-5/8" x 2 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00
3'-4"

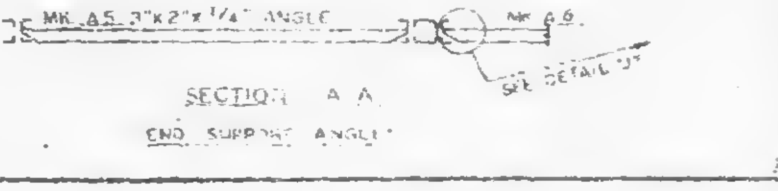
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

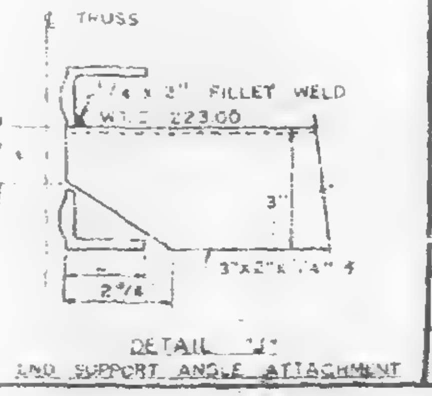


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	16	C32T5 - 35'-8"	ST[illegible]
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST298
3 1/4" x 2" x 1/4" ANGLE	A1	3	3"x2"x1/4" x 19'-11"	ST 403
	A5	4	3"x2"x1/4" x 6'-1 7/8"	ST 403
	A6	2	3"x2"x1/4" x 6'-2"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	3	7" x .0135" x 17'-10 1/2"	ST 303
	F1	3	7" x .0135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	8 REBAR x 0'-7"	ST 400
DAMPING SADDLE ⚠1	DUS-4	3	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST298
CONNECTION BAR	CB1	2	1 1/2" x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .30" x 0'-9"	ST 400
⚠1	P7	2	6 1/2" x 1/2" x 1'-0"	ST[illegible]






TRUSS
1/4" x 2" FILLET WELD W.T.C. 223.00
3"
3" x 2" x 1/4" x 4"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

NO.	DATE		
⚠3	8-28-69	AS NOTED	G.D.C.
⚠2	2-21-69	AS NOTED	G.D.C.
⚠1	10-16-68	MATERIAL LIST	[illegible]

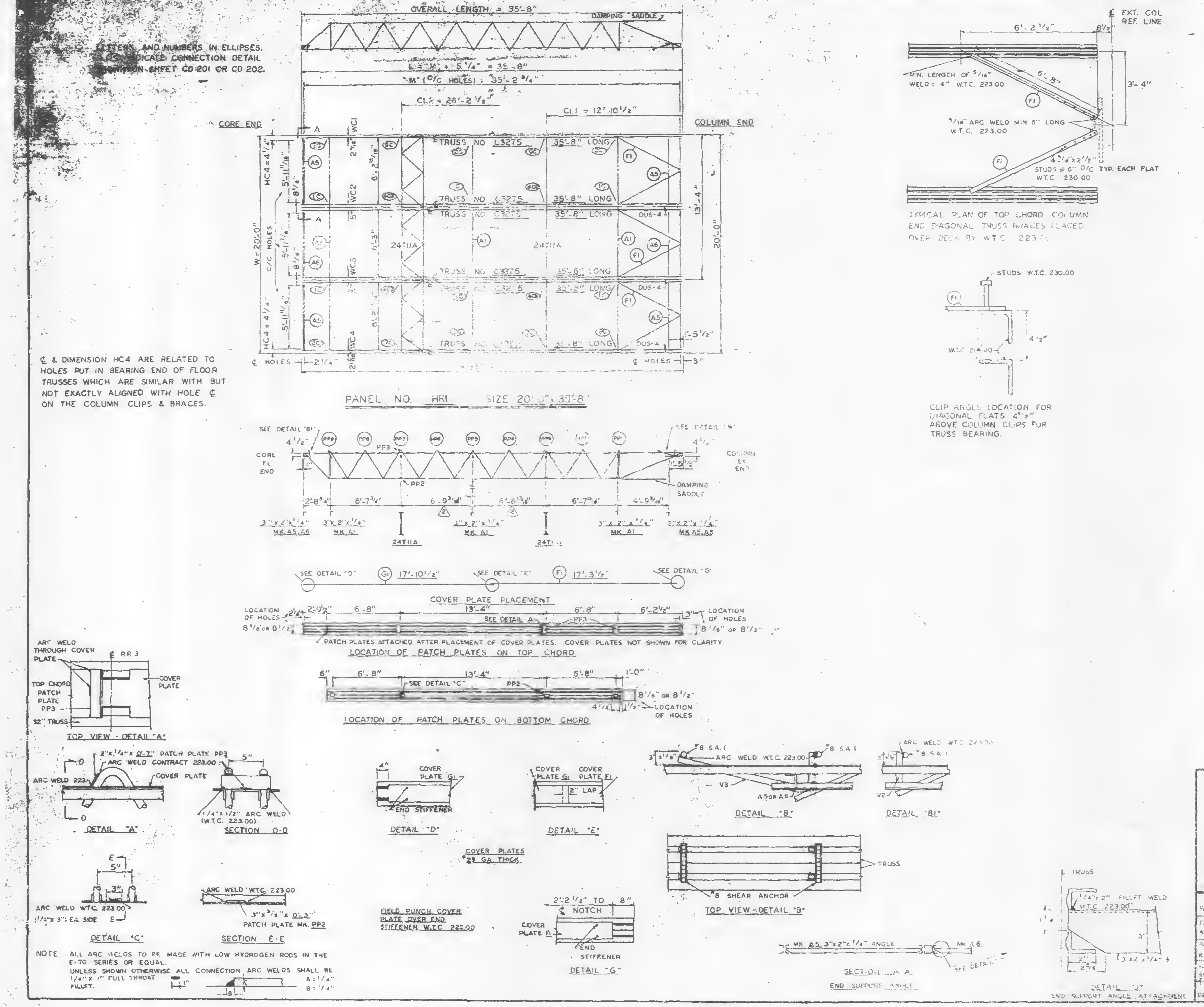
⚠3 REF DRWG
7-AB4-3.1 [illegible]
7-AB4-15 & 16 7-22-68
7-AB4-39-41 7-22-68
SA-124 1-8-69
7-AB3-2 1-3-68
7-AB1-11 & 12 7-22-68
7-AB2-6 7-22-68
7-AB4-[illegible] 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 50-58, 60-66, 68-[illegible] 91-[illegible]
93-105 (E & W) 45-49 (W) 80-83 (E) PANEL H [illegible] 35'-8"
⚠3 BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-106 [illegible]

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 1/12/70
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. DATE
DETAILED BY A.C. WEBER
DESIGN DRAWING NO. 7-AB3-17
DRAWN BY [illegible]
DATE APRIL 10, 1968
CHECKED BY T.M. [illegible]
DATE APRIL 10, 1968
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. [illegible] H1

LETTERS AND NUMBERS IN ELLIPSES, [illegible] INDICATE CONNECTION DETAIL [illegible] ON SHEET CD 201 OR CD 202.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	[illegible]
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST303
BRIDGING TRUSSES	T11A	2	24T11A - 19'-11"	ST[illegible]
~~3"x2"x1/4" ANGLE~~	A1	6	3"x2"x1/4"x 19'-11"	ST 40[illegible]
	~~A5~~		[illegible]	ST 40[illegible]
	A6	2	3"x2"x1/4"x 6'-2"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 5/8"x 6'-8"	ST 403
PATCH PLATES	PP3	12	2"x 1/4"x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x.0135"x 17'-10 1/2"	ST 303
	F1	3	7"x.0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2"x 1 1/2"x 1/4"x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3 1/2"x 1/2"x 3/8"x 3'-6 3/4"	ST29[illegible]
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	2	4 1/2"x .39"x 0'-9"	ST 400
	P7	2	6 1/2"x 1/2"x 1'-0"	ST 401

NO.	DATE	REVISION	BY
3	6-23-69	AS NOTED	G.D.C.
2	2-21-69	AS NOTED	G.D.C.
1	10-18-68	LIST OF MATERIAL	G.D.C.

REF. DRWG.

7-A84-3.1	1-3-68
7-A84-15 & 16.	7-22-68
7-A84-39-41	1-3-68
SA-124	1-6-69
7-A83-2	1-3-68
7-A81-11 & 12	7-22-68
7-A82-8	7-22-68
7-A84-42 & 43	10-15-68

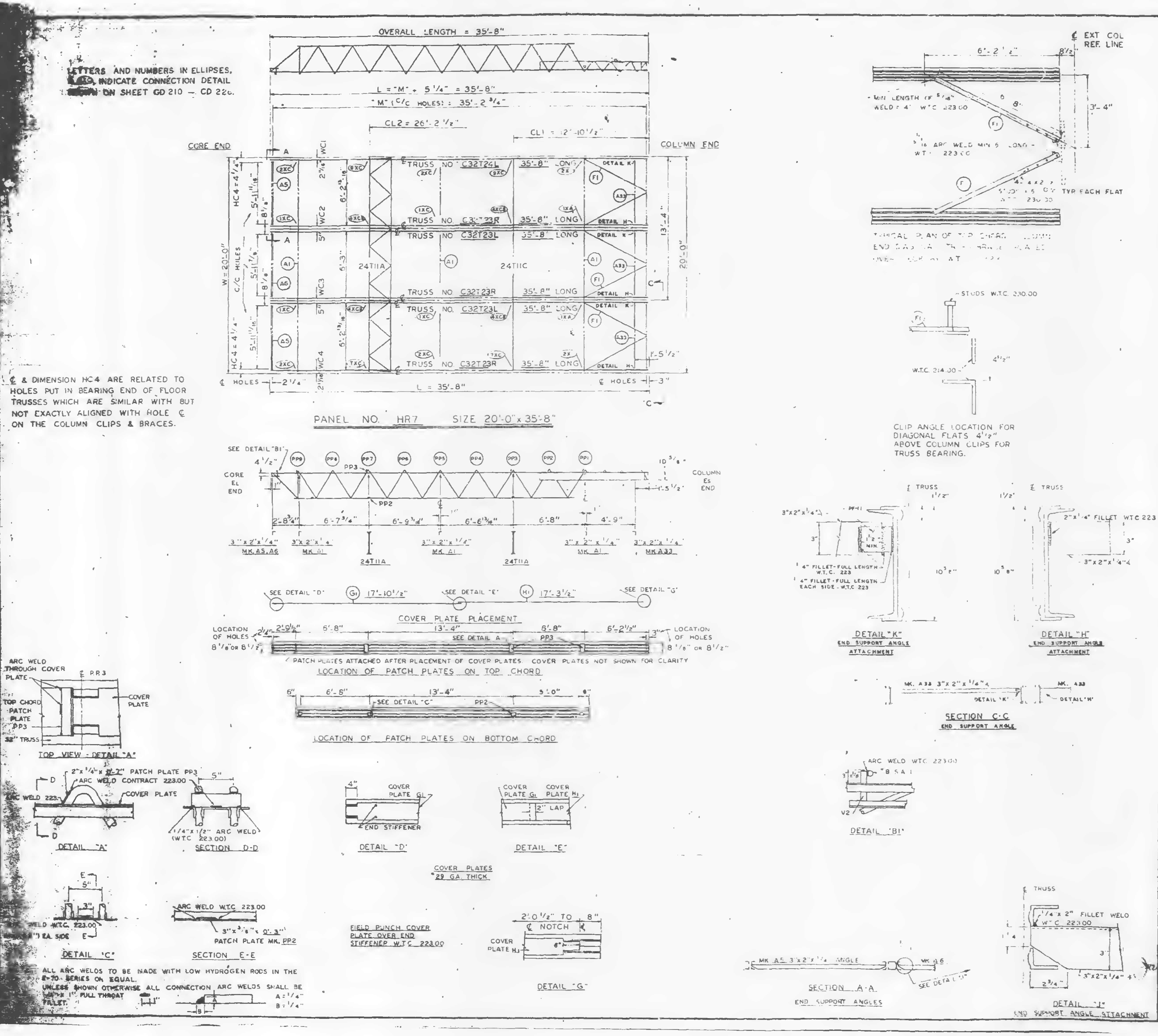
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40 (EAST & WEST) 47-49, 50-58, 60-66, 68-74 (EAST) PANEL HR1 - 20[illegible]
BLDG. B FLOORS 14-24, 26-40 (NORTH & SOUTH) 45 [illegible]

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-18
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A DATE 1/2/70
DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR DATE
CHECKED BY T.M.CHURA DATE APRIL 10, 1968
DET. [illegible] LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
[illegible] HR1

LETTERS AND NUMBERS IN ELLIPSES, [illegible] INDICATE CONNECTION DETAIL [illegible] ON SHEET GD 210 — CD 226.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T24L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
TRUSS NO. C32T23L 35'-8" LONG
24T11A
24T11C
DETAIL K
DETAIL H
HC4 = 4 1/4"
W = 20'-0"
C/C HOLES
WC1
WC2
WC3
WC4
13'-4"
20'-0"
℄ HOLES
L = 35'-8"
PANEL NO. HR7 SIZE 20'-0" x 35'-8"
SEE DETAIL "B1"
PP9
PP8
PP7
PP6
PP5
PP4
PP3
PP2
PP1
CORE EL END
COLUMN EL END
2'-8 3/4"
6'-7 3/4"
6'-9 3/4"
6'-6 13/16"
6'-8"
4'-9"
3" x 2" x 1/4" MK. A5, A6
3" x 2" x 1/4" MK. A1
24T11A
MK. A33
SEE DETAIL "D"
G1
17'-10 1/2"
SEE DETAIL "E"
H1
17'-3 1/2"
SEE DETAIL "G"
COVER PLATE PLACEMENT
LOCATION OF HOLES 8 1/8" OR 8 1/2"
2'-9 1/2"
6'-8"
13'-4"
6'-8"
6'-2 1/2"
SEE DETAIL A
PP3
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
6'-8"
13'-4"
5'-0"
SEE DETAIL "C"
PP2
LOCATION OF PATCH PLATES ON BOTTOM CHORD
ARC WELD THROUGH COVER PLATE
℄ PP3
COVER PLATE
TOP CHORD PATCH PLATE PP3
32" TRUSS
TOP VIEW - DETAIL "A"
2" x 1/4" x 0'-7" PATCH PLATE PP3
ARC WELD CONTRACT 223.00
ARC WELD 223
COVER PLATE
DETAIL "A"
1/4" x 1/2" ARC WELD (W.T.C. 223.00)
SECTION D-D
COVER PLATE G1
END STIFFENER
DETAIL "D"
COVER PLATE G1
COVER PLATE H1
2" LAP
DETAIL "E"
COVER PLATES 29 GA. THICK
ARC WELD W.T.C. 223.00
EA. SIDE
DETAIL "C"
3" x 3/8" x 0'-3" PATCH PLATE MK. PP2
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
2'-0 1/2" TO 8"
℄ NOTCH
COVER PLATE H1
DETAIL "G"
EXT. COL. REF. LINE
6'-2 1/2"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16 ARC WELD MIN 5" LONG W.T.C. 223.00
TYP EACH FLAT
TYPICAL PLAN OF TOP CHORD ... END ... BRACE ...
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
℄ TRUSS
3" x 2" x 1/4" ∠
1/4" FILLET - FULL LENGTH W.T.C. 223
1/4" FILLET - FULL LENGTH EACH SIDE - W.T.C. 223
10 3/8"
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
2" x 1/4" FILLET W.T.C. 223
3" x 2" x 1/4" ∠
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK. A33 3" x 2" x 1/4" ∠
DETAIL "K"
DETAIL "H"
SECTION C-C END SUPPORT ANGLE
ARC WELD W.T.C. 223.00
#8 S.A.
DETAIL "B1"
MK. A5 3" x 2" x 1/4" ANGLE
MK. A6
SEE DETAIL "J"
SECTION A-A END SUPPORT ANGLES
TRUSS
1/4" x 2" FILLET WELD W.T.C. 223.00
3" x 2" x 1/4" ∠
DETAIL "J" END SUPPORT ANGLE ATTACHMENT

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	2	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST223R
	T24L	1	C32T24L - 35'-8"	ST224L
BRIDGING TRUSSES	T11A	1	24T11A - 19'-11"	ST211A
	T11C	1	24T11C1 - 19'-11"	ST211C
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST403
	A5	2	3" x 2" x 1/4" x 6'-2 13/16"	ST403
	A6	1	3" x 2" x 1/4" x 6'-2"	ST403
	A33	3	3" x 2" x 1/4" x 5'-0 1/2"	ST410
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7"	ST400
	PP2	12	3" x 3/8" x 0'-3"	ST400
COVER PLATES	G1	3	7' x 0.135" x 17'-10 1/2"	ST303
	H1	3	7' x 0.135" x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST400
#8 SHEAR ANCHOR	SA	3	#8 REBAR x 0'-7"	ST400
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST402
CONNECTION BAR	CB1	3	1" ⌀ x 1'-3"	ST400
CONNECTION PLATES	P1	2	3 1/2" x 3/8" x 0'-6 1/2"	ST400
	P2	2	4 1/2" x .39" x 0'-9"	ST400
	P7	2	6 1/2" x .50" x 1'-0"	ST401
CLOSURE PLATE	PF11	3	3" x 1/4" x 0'-2 3/8"	ST412

NO	DATE	REVISION	BY

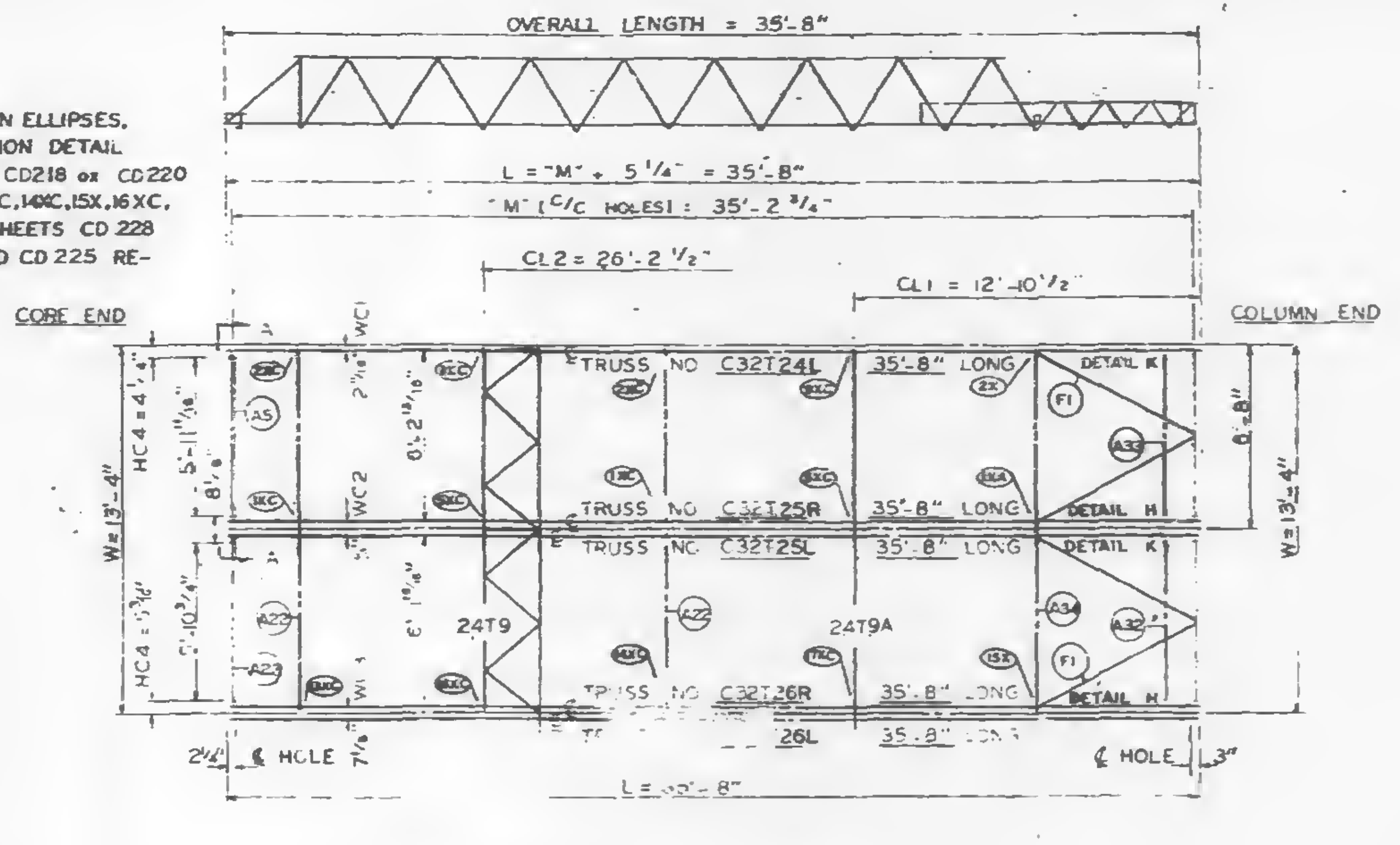
REF DWG	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-15 2	10-4-68
SB-12 4	3-24-69
7-AB3-39	10-4-68
7-AB1-22	10-4-68
7-AB2-6	7-22-68
7-AB2-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG B FLOORS 25, 59 & 92 (NORTH & SOUTH)
PANEL HR7 - 20'-0" x 35'-8"

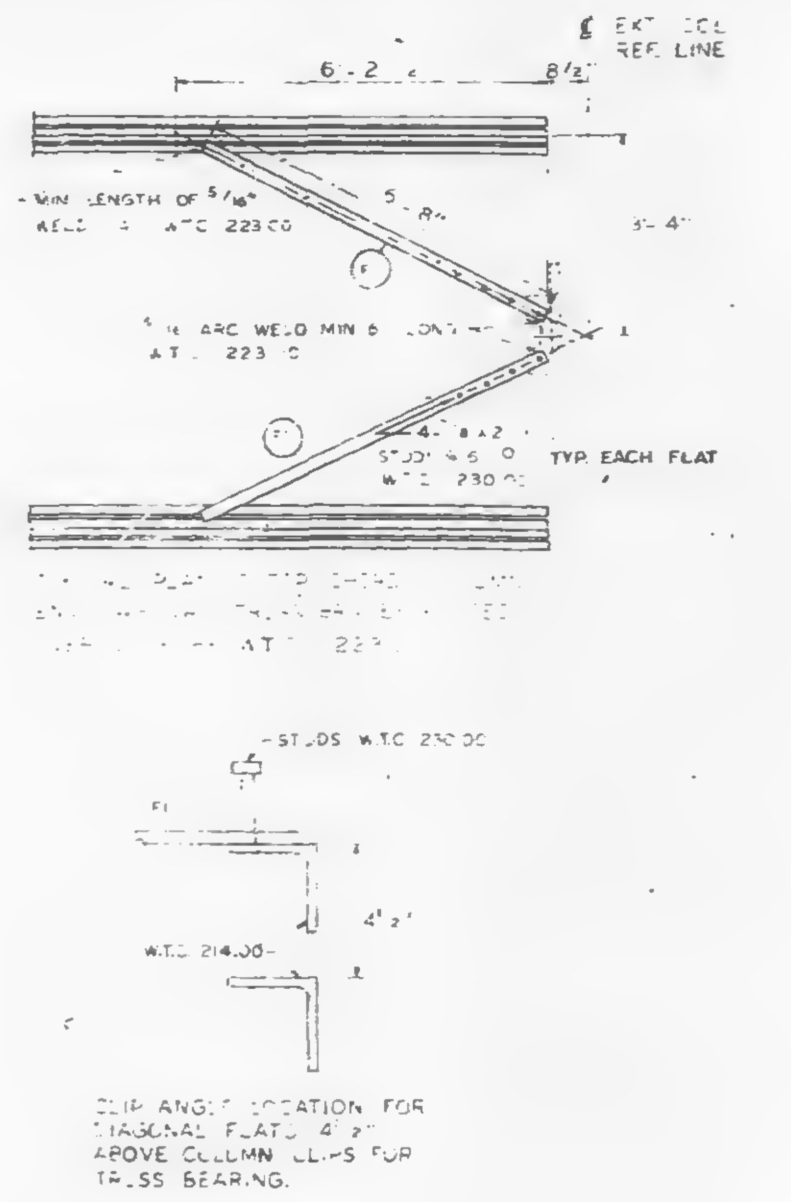
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-39 PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA. DATE 6/6/69
DRAWN BY [illegible] DATE MAY 8, 1969
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. DATE
CHECKED BY T.M. CHURA DATE MAY 8, 1969
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-HR7

LETTERS AND NUMBERS IN ELLIPSES, INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 211 CD218 or CD220 SPECIAL CONNECTIONS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228 CD 226, CD 210, CD 227, AND CD 225 RESPECTIVELY.

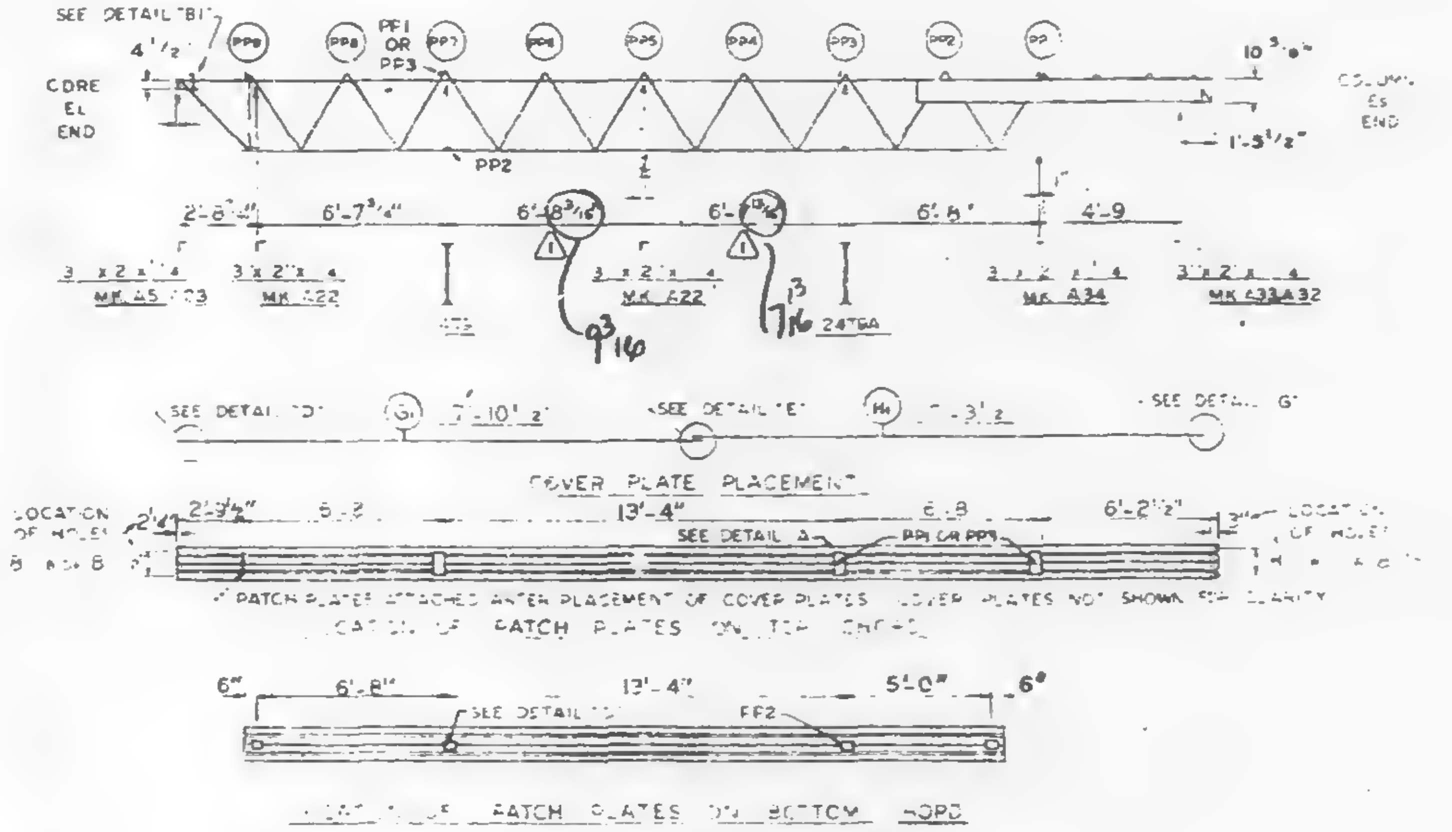

OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) : 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO C32T24L 35'-8" LONG
TRUSS NO C32T25R 35'-8" LONG
TRUSS NO C32T25L 35'-8" LONG
TRUSS NO C32T26R 35'-8" LONG
26L 35'-8" LONG
DETAIL K
DETAIL H
24T9
24T9A
W = 13'-4"
HC4 = 4'-4"
6'-8"
℄ HOLE
L = 35'-8"

PANEL G2 SIZE 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

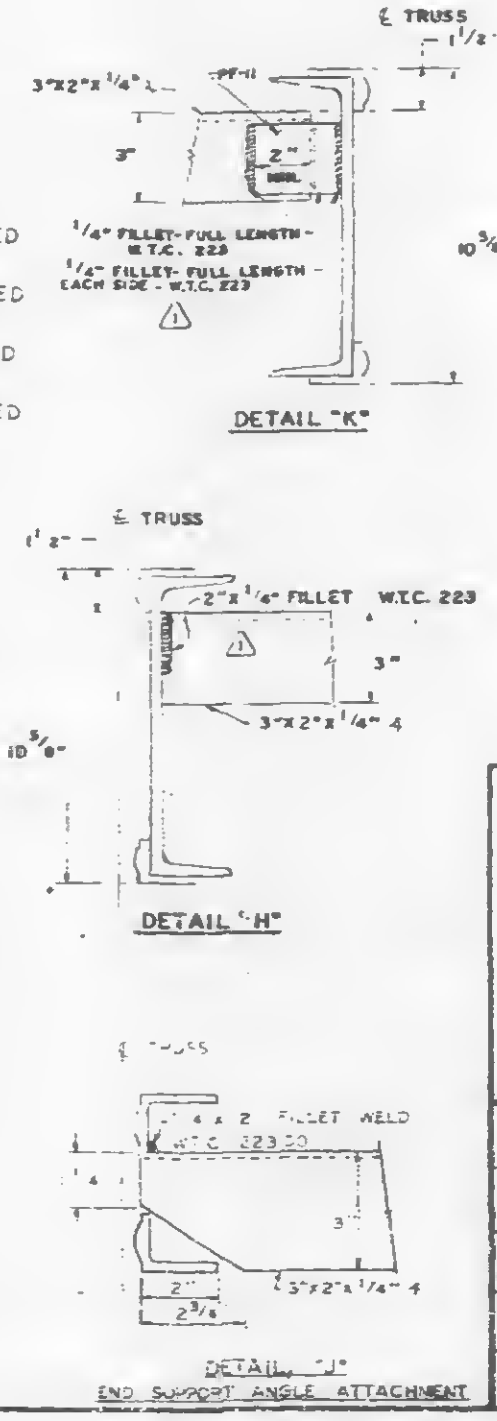

6'-2"
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD AT W.T.C. 223.00
3'-4"
ARC WELD MIN 6" CONT. W.T.C. 223.00
STUDS W.T.C. 230.00
TYP. EACH FLAT
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x 2"x 1/4" ANGLE	A5	1	3"x2"x1/4"x6'-1 3/4"	ST 403
	A22	2	3"x2"x1/4"x17'-3 1/2"	ST 403
	A23	1	3"x2"x1/4"x6'-9"	ST 405
	A32	1	3"x2"x1/4"x5'-3 1/2"	ST 410
	A33	1	3"x2"x1/4"x5'-10 1/2"	ST 410
	A34	1	3"x2"x1/4"x13'-8"	ST 410
PATCH PLATES	PP1	4	2"x1/4"x0'-9"	ST 400
	PP2	6	3"x3/8"x0'-3"	ST 400
	PP3	[illegible]	2"x1/4"x0'-7"	ST 400
COVER PLATES	H	[illegible]	9"x.0135"x17'-3 1/2"	ST 304
	H1	1	7"x.0135"x17'-3 1/2"	ST 304
	G	1	9"x.0135"x17'-10 1/2"	ST 303
	G1	1	7"x.0135"x17'-10 1/2"	ST 303
ANGLE CLIPS	C1	8	2"x1 1/2"x.25"x6"	ST 400
#5 SHEAR ANCHOR	SA1	1	#5 REBAR x 0'-7"	ST 400
	SA2	1	#5 REBAR x 0'-9"	ST 400
DIAGONAL FLATS	F1	4	1 1/2"x3/8"x6'-8"	ST 402
CLOSURE PLATES	PF-11	2	3"x1/4"x0'-2 3/4"	ST 412
SPECIAL CONNECTION UNITS	13XC	1	SEE REF DRWG.	ST 274
	14XC	1	SEE REF DRWG.	ST 272
	15X	1	SEE REF DRWG.	ST 275
	16XC	1	SEE REF DRWG.	ST 273
	17XC	1	SEE REF DRWG.	ST 271



PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

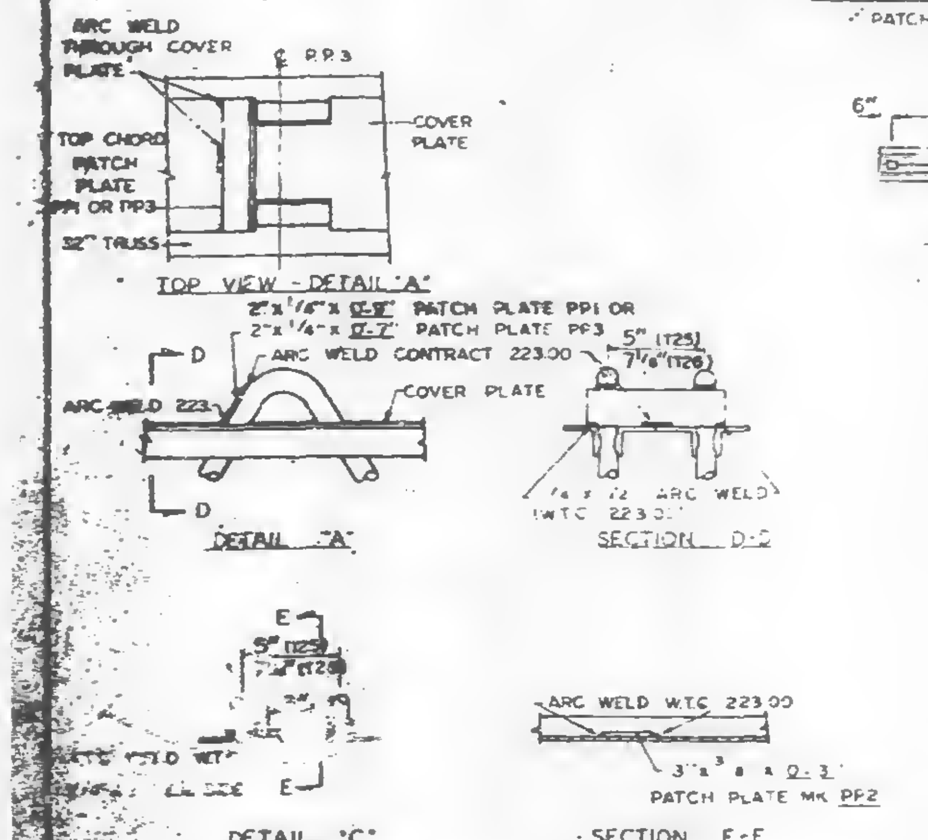
COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

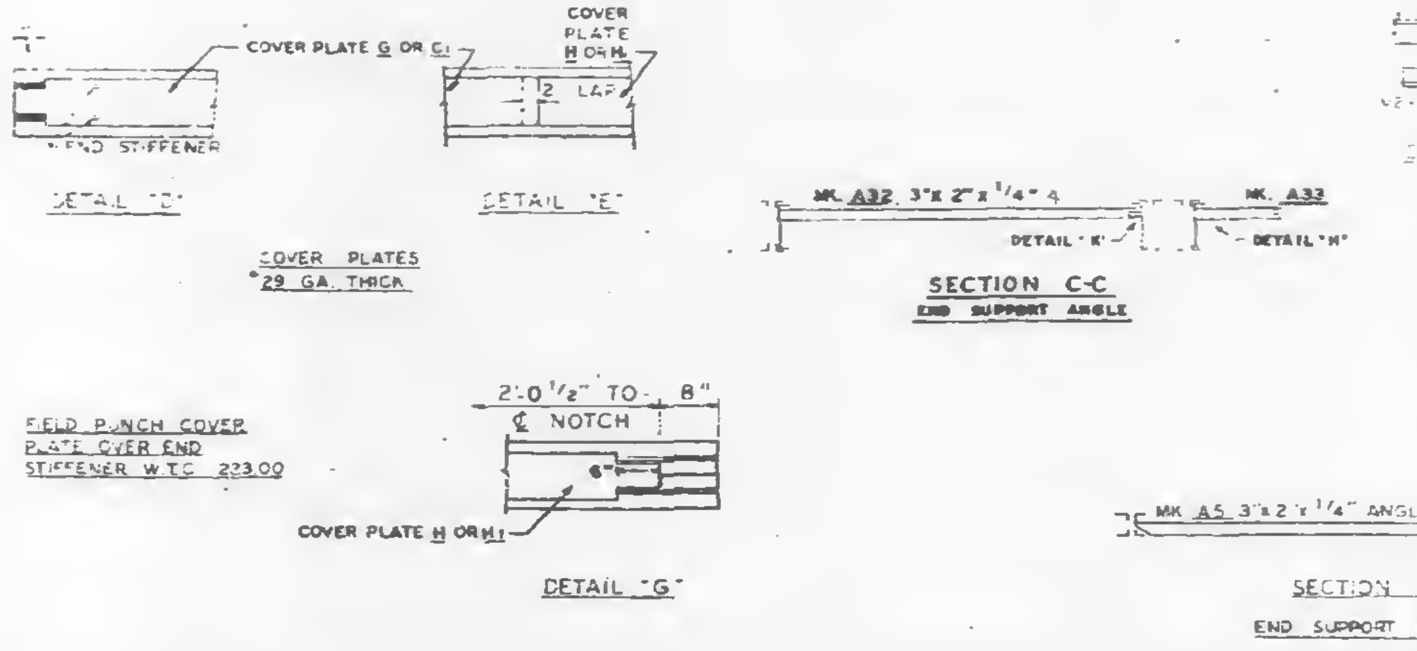

℄ TRUSS
1 1/2"
3"x2"x1/4" L
PF-11
1/4" FILLET-FULL LENGTH-W.T.C. 223
1/4" FILLET-FULL LENGTH-EACH SIDE-W.T.C. 223
10 3/8"
DETAIL "K"
℄ TRUSS
2"x1/4" FILLET W.T.C. 223
3"
3"x2"x1/4" 4
10 3/8"
DETAIL "H"
℄ TRUSS
1/4"x2" FILLET WELD W.T.C. 223.00
3"
2 3/4
3"x2"x1/4" 4
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

1	2-4-69	AS NOTED	
NO.	DATE	REVISION	BY

REF DRWG	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-15.2	10-4-68
SA-124	10-11-68
7-AB3-36	10-4-68
7-AB1-22 & 23	10-4-68
7-AB2-4	7-22-68

SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
APPROVED AS NOTED
28 Feb 69 SK



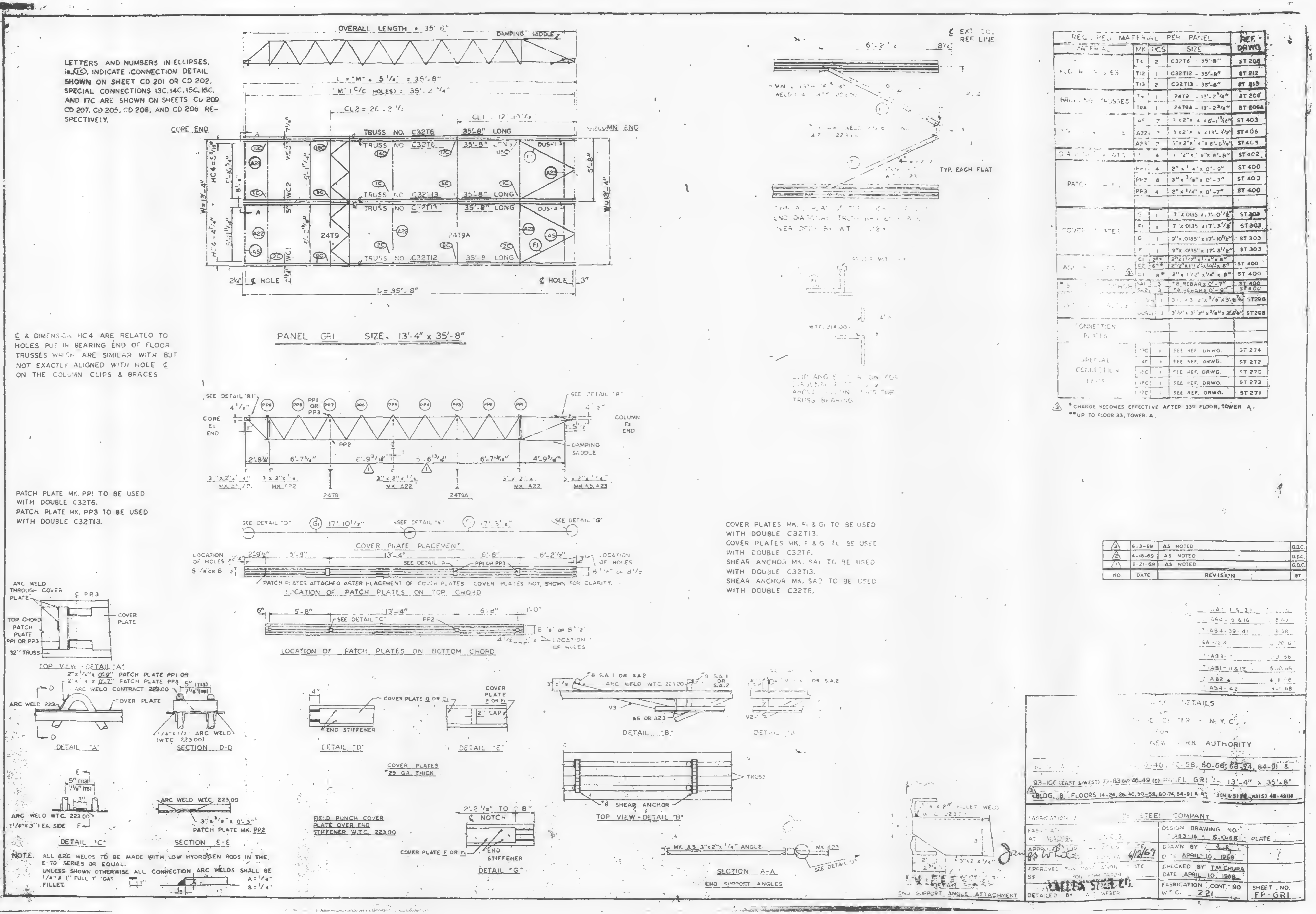


NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92 (EAST & WEST)
PANEL G2 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-36 10-4-68 PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A DATE
DRAWN BY
DATE JAN 2, 1969
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR DATE
CHECKED BY T.M. CHUHA
DATE JAN 3, 1969
LACLEDE STEEL CO.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP G2



LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL T' COAT FILLET. A = 1/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRIDGING TRUSSES	T9	1	24T9 - 13'-2 3/4"	ST 209
	T9A	1	24T9A - 13'-2 3/4"	ST 209A
[illegible]	A5	2	3" x 2" x 1/4" x 6'-1 13/16"	ST 403
	A22	2	3" x 2" x 1/4" x 13'-3 1/2"	ST 405
	A23	2	3" x 2" x 1/4" x 6'-0 7/8"	ST 405
DAMPING [illegible]	[illegible]	4	[illegible] 2" x [illegible] x 6'-8"	ST 402
PATCH [illegible]	PP1	4	2" x 1/4" x 0'-9"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
	PP3	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	G1	1	7" x .0135 x 17'-0 1/2"	ST 303
	F1	1	7" x .0135 x 17'-3 1/2"	ST 303
	G	1	9" x .0135" x 17'-10 1/2"	ST 303
	F	1	9" x .0135" x 17'-3 1/2"	ST 303
ANCHOR [illegible] △3	C1	2**	2" x 1 1/2" x 1/4" x 6"	ST 400
	C2	6**	2 1/2" x 1 1/2" x 1/4" x 6"	
	C1	8*	2" x 1 1/2" x 1/4" x 6"	ST 400
* SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST 400
	SA2	3	#8 REBAR x 0'-9"	ST 400
[illegible]	[illegible]	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION [illegible]	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

△3 * CHANGE BECOMES EFFECTIVE AFTER 33RD FLOOR, TOWER A.
** UP TO FLOOR 33, TOWER A.

NO.	DATE	REVISION	BY
△3	6-3-69	AS NOTED	G.D.C.
△2	4-18-69	AS NOTED	G.D.C.
△1	2-21-69	AS NOTED	G.D.C.

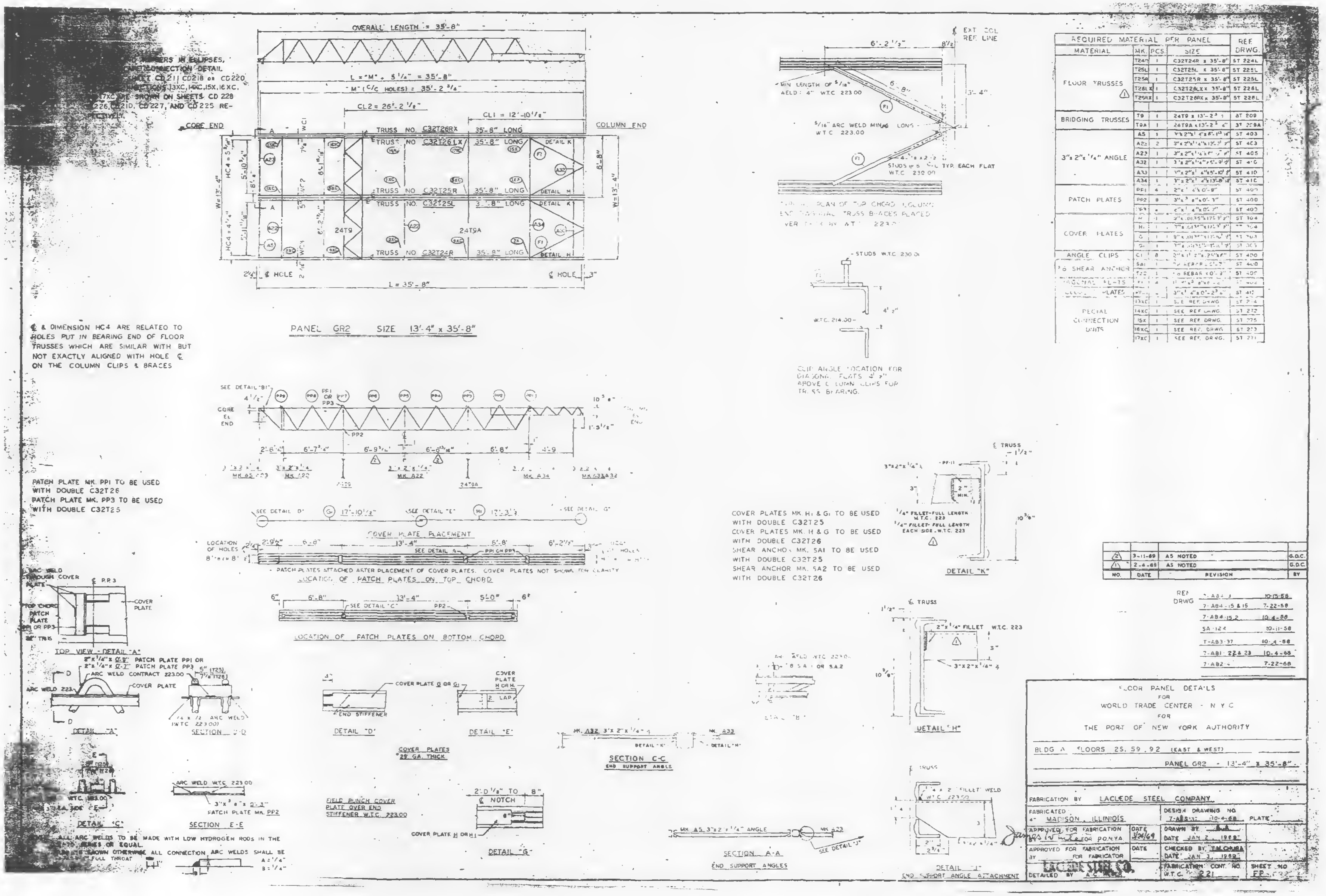
[illegible] AB1 - 1 & 31	[illegible]
[illegible] AB4 - 5 & 16	6 [illegible]
[illegible] AB4 - 39 - 41	3-58
SA [illegible]	[illegible]
[illegible] AB3 - [illegible]	[illegible] 56
[illegible] AB1 - 11 & 12	5-10-68
[illegible] AB2 - 4	4-1-68
[illegible] AB4 - 42	[illegible] 68

[illegible] DETAILS
[illegible]
[illegible] CENTER - N.Y.C.
FOR
[illegible] NEW [illegible] RK AUTHORITY

[illegible] 40, [illegible]-58, 60-66, 68-74, 84-91 &
93-106 (EAST & WEST) 75-83 (W) 46-49 (E) PANEL GR1 [illegible] 13'-4" x 35'-8"
△3 BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91 & [illegible] (N & S) [illegible] 83 (S) 46-49 (N)

FABRICATION [illegible] STEEL COMPANY
FABRICATED AT [illegible]
APPROVED [illegible] DATE
BY James White 6/12/69
APPROVED [illegible] DATE
BY [illegible]
DETAILED BY [illegible] WEBER

DESIGN DRAWING NO. [illegible] AB3-16 [illegible] 5-10-68 PLATE
DRAWN BY [illegible]
DATE APRIL 10, 1968
CHECKED BY T.M. CHURA
DATE APRIL 10, 1968
FABRICATION CONT. NO W.T.C. 221
SHEET NO. FP-GR1


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/8"
CL1 = 12'-10 1/8"
CORE END
COLUMN END
TRUSS NO. C32T26RX 35'-8" LONG
TRUSS NO. C32T26LX 35'-8" LONG
TRUSS NO. C32T25R 35'-8" LONG
TRUSS NO. C32T25L 35'-8" LONG
TRUSS NO. C32T24R 35'-8" LONG
DETAIL K
DETAIL H
24T9
24T9A
HC4 = 5 3/16"
HC4 = 4 1/4"
W = 13'-4"
℄ HOLE
L = 35'-8"
PANEL GR2 SIZE 13'-4" x 35'-8"
6'-2 1/2"
℄ EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16" ARC WELD MIN. 4" LONG W.T.C. 223.00
STUDS W.T.C. 230.01
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" x" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
CORE ℄ END
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
2"x1/4"x 0'-9" PATCH PLATE PP1 OR
2"x1/4"x 0'-7" PATCH PLATE PP3
ARC WELD CONTRACT 223.00
COVER PLATE
ARC WELD 223
DETAIL "A"
SECTION D-D
DETAIL "D"
END STIFFENER
COVER PLATE G OR G1
DETAIL "E"
COVER PLATES 22 GA. THICK
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
2'-0 1/8" TO 8"
℄ NOTCH
COVER PLATE H OR H1
DETAIL "G"
SECTION C-C END SUPPORT ANGLE
MK. A32 3"x 2"x 1/4"
MK. A5 3"x2"x1/4" ANGLE
SECTION A-A END SUPPORT ANGLES
DETAIL "C"
ARC WELD W.T.C. 223.00
3"x 3/8" x 0'-3" PATCH PLATE MK. PP2
SECTION E-E
DETAIL "B"
℄ TRUSS
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE W.T.C. 223
DETAIL "K"
2"x1/4" FILLET W.T.C. 223
3"x2"x1/4"
DETAIL "H"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NUMBERS IN ELLIPSES, CONNECTION DETAIL SHEET CD 211 CD218 or CD220 CONNECTIONS 13XC, 14XC, 15X, 16XC, 17XC ARE SHOWN ON SHEETS CD 228 226, CD 210, CD 227, AND CD 225 RESPECTIVELY.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES △1	T24R	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX	1	C32T26LX x 35'-8"	ST 226L
	T26RX	1	C32T26RX x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x 2"x 1/4" ANGLE	A5	1	3"x 2"x 1/4"x 6'-1 13/16"	ST 403
	A22	2	3"x 2"x 1/4"x 12'-3 1/2"	ST 403
	A23	1	[illegible]	ST 405
	A32	1	3"x 2"x 1/4"x 5'-9 1/4"	ST 410
	A33	1	3"x 2"x 1/4"x 5'-10 1/2"	ST 410
	A34	1	3"x 2"x 1/4"x 13'-8 1/4"	ST 410
PATCH PLATES	PP1	4	2"x 1/4"x 0'-9"	ST 400
	PP2	8	3"x 3/8"x 0'-3"	ST 400
	PP3	[illegible]	2"x 1/4"x 0'-7"	ST 400
COVER PLATES	H	1	[illegible]	ST 304
	H1	1	[illegible]	[illegible]
	G	1	[illegible]	ST 303
	G1	1	[illegible]	ST 303
ANGLE CLIPS	C1	8	[illegible]	ST 400
SHEAR ANCHOR	SA1	1	REBAR x 0'-3"	ST 400
	SA2	1	REBAR x 0'-3"	ST 400
DIAGONAL FLATS	[illegible]	4	[illegible]	[illegible]
[illegible] PLATES	[illegible]	[illegible]	3"x 1/4"x 0'-2 3/4"	ST 410
SPECIAL CONNECTION UNITS	13XC	1	SEE REF. DRWG.	ST 2[illegible]
	14XC	1	SEE REF. DRWG.	ST 272
	15X	1	SEE REF. DRWG.	ST 275
	16XC	1	SEE REF. DRWG.	ST 273
	17XC	1	SEE REF. DRWG.	ST 271

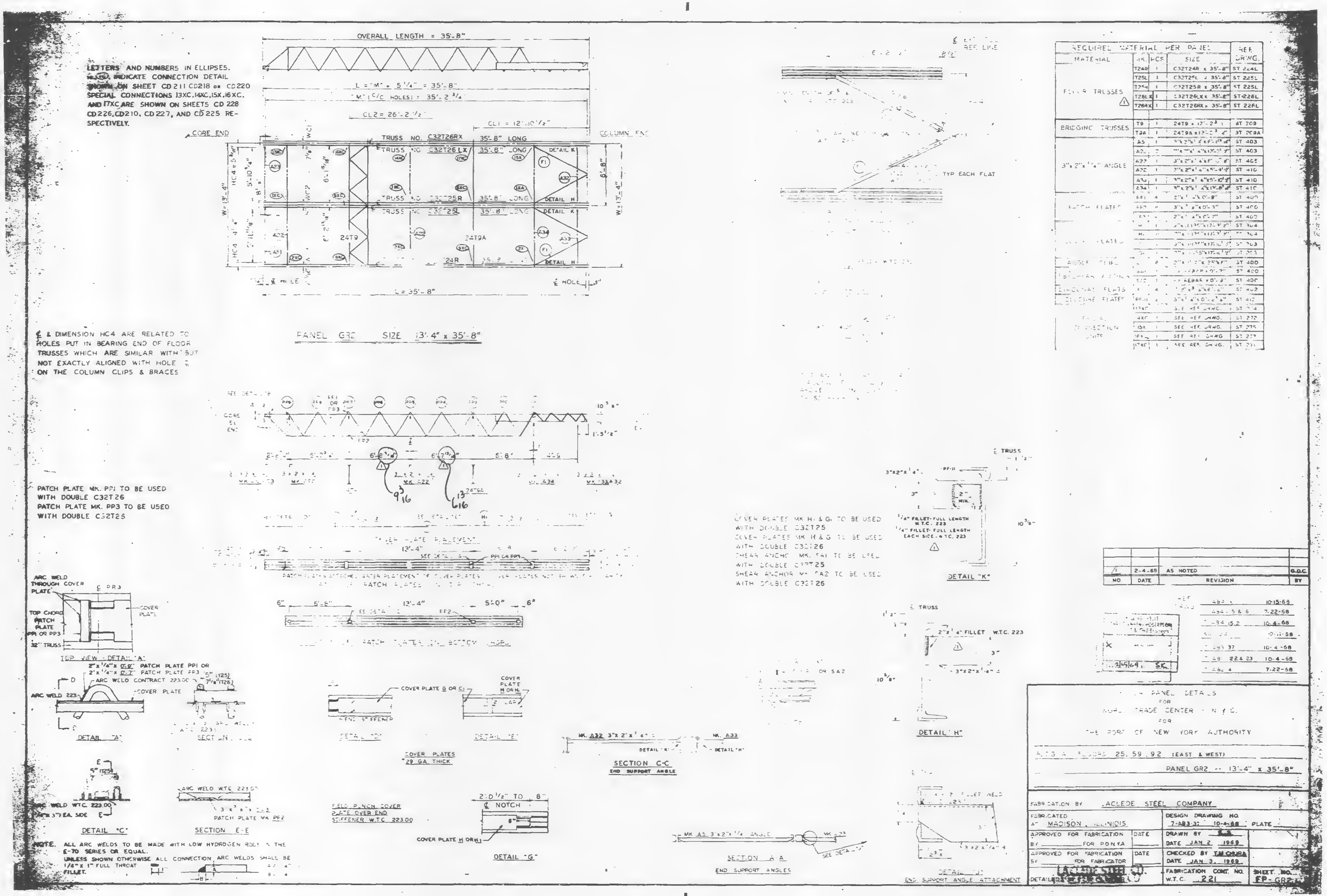
NO.	DATE	REVISION	BY
△2	3-11-69	AS NOTED	G.D.C.
△1	2-4-69	AS NOTED	G.D.C.

REF DRWG	
7-AB4-[illegible]	10-15-68
7-AB4-15 & 15	7-22-68
7-AB4-15.2	10-4-68
SA-124	10-11-68
7-AB3-37	10-4-68
7-AB1-22 & 23	10-4-68
7-AB2-4	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92 (EAST & WEST)
PANEL GR2 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-37 10-4-68 PLATE
APPROVED FOR FABRICATION BY James [illegible] FOR P.O.N.Y.A. DATE 3/24/69
DRAWN BY A.A. DATE JAN 2, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHUBA DATE JAN 3, 1969
LACLEDE STEEL CO.
DETAILED BY A.C. [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-[illegible]



LETTERS AND NUMBERS IN ELLIPSES, I.E. (15X), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 211 CD218 OR CD 220 SPECIAL CONNECTIONS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228 CD226, CD210, CD 227, AND CD 225 RESPECTIVELY.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

COVER PLATES MK H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES ⚠1	T24R	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX	1	C32T26LX x 35'-8"	ST 226L
	T26RX	1	C32T26RX x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x2"x1/4" ANGLE	A5	1	3"x2"x1/4"x6'-[illegible]	ST 403
	A22	2	3"x2"x1/4"x13'-[illegible]	ST 403
	A23	1	3"x2"x1/4"x6'-[illegible]	ST 405
	A32	1	3"x2"x1/4"x5'-[illegible]	ST 410
	A33	1	3"x2"x1/4"x5'-10 1/2"	ST 410
	A34	1	3"x2"x1/4"x13'-[illegible]	ST 410
PATCH PLATES	PP1	4	2"x1/4"x0'-9"	ST 400
	PP2	[illegible]	3"x3/8"x0'-3"	ST 400
	PP3	[illegible]	2"x1/4"x0'-7"	ST 400
COVER PLATES	H	1	[illegible] .0135"x17'-3 1/2"	ST 304
	H1	[illegible]	[illegible] .0135"x17'-3 1/2"	ST 304
	[illegible]	[illegible]	3"x .0135"x17'-10 1/2"	ST 303
	[illegible]	1	[illegible] .0135"x17'-10 1/2"	ST 303
ANGLE CLIPS	[illegible]	2	2"x[illegible]"x 25"x F"	ST 400
SHEAR ANCHOR	SA1	1	[illegible] REBAR x 0'-7"	ST 400
	SA2	1	[illegible] REBAR x 0'-9"	ST 400
DIAGONAL FLATS	F1	4	[illegible]"x3/8"x6'-6"	ST 402
BEARING PLATES	PF11	2	3"x1/4"x0'-2 3/4"	ST 412
FIELD CONNECTION UNITS	13XC	[illegible]	SEE REF DRWG.	ST [illegible]
	14XC	1	SEE REF DRWG.	ST 272
	15X	1	SEE REF DRWG.	ST 275
	16X[illegible]	1	SEE REF DRWG.	ST 273
	17XC	1	SEE REF DRWG.	ST 231

⚠1	2-4-69	AS NOTED	G.D.C.
NO	DATE	REVISION	BY

REF DWGS	
[illegible]	10-15-68
[illegible] 4, 5 & 6	7-22-68
[illegible] 15.2	10-4-68
[illegible]	10-11-68
[illegible] 37	10-4-68
[illegible] 22 & 23	10-4-68
[illegible] 4	7-22-68

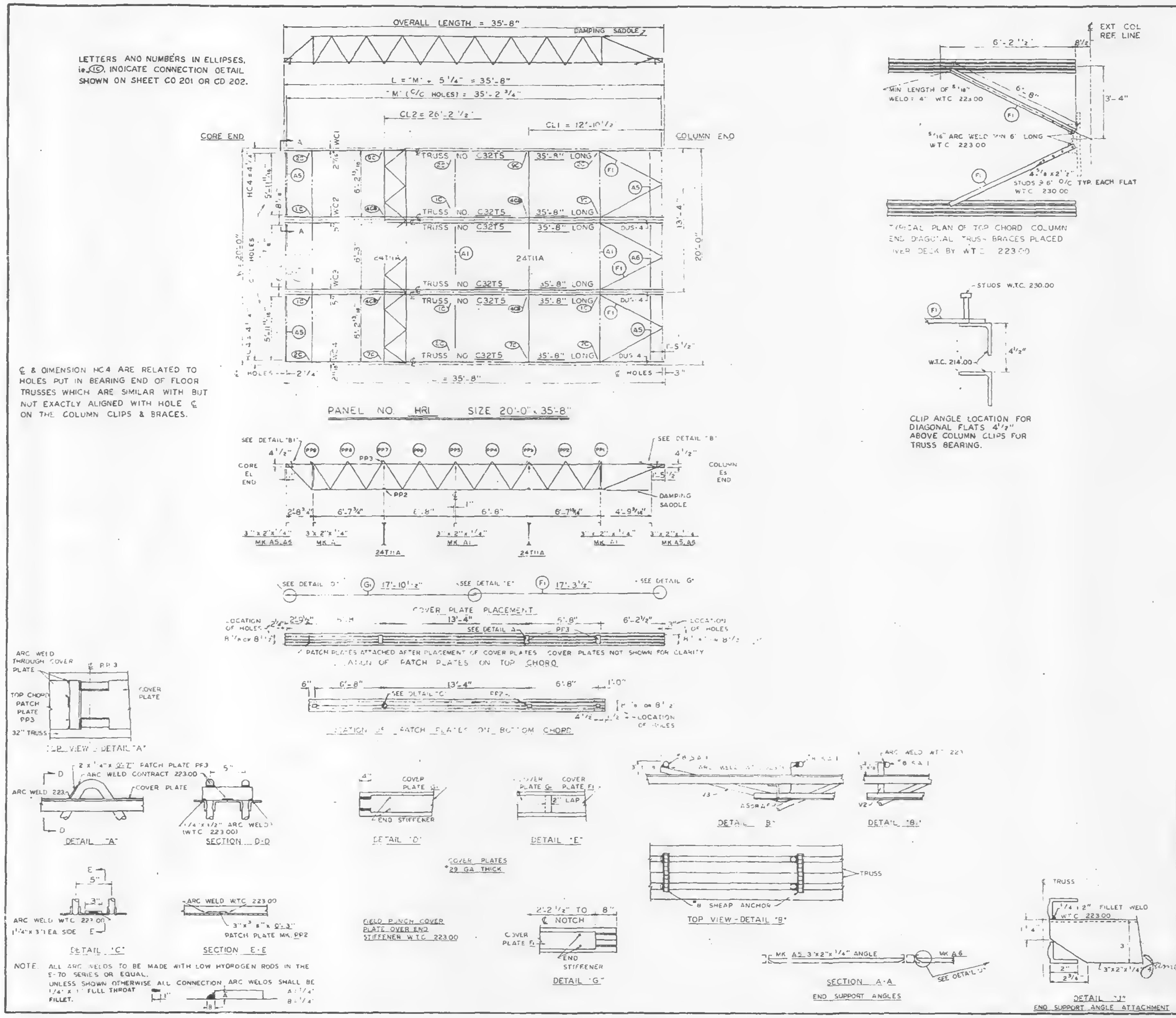
[illegible] 2/4/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

[illegible] FLOORS 25, 59, 92 (EAST & WEST)
PANEL GR2 -- 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-37 10-4-68 PLATE
APPROVED FOR FABRICATION BY ________ FOR P.O.N.Y.A. DATE
DRAWN BY [illegible]
DATE JAN 2 1969
APPROVED FOR FABRICATION BY ________ FOR FABRICATOR DATE
CHECKED BY T.M.OHURA
DATE JAN 3, 1969
DETAILED BY LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-GR2

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



€ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES.

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET. A : 1/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	BT211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST403
	A5	4	3"x2"x1/4"x 6'-1 13/16"	ST403
	A6	2	3"x2"x1/4"x 6'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2"x5/8"x 6'-8"	ST402
PATCH PLATES	PP3	12	2"x1/4"x 0'-7"	ST400
	PP2	12	3"x3/8"x 0'-3"	ST400
COVER PLATES	G1	3	7"x 0.135"x 17'-10 1/2"	ST303
	F1	3	7"x 0.135"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2"x 1 1/2"x 1/4"x 6"	ST400
#8 SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS-4	3	3 1/2"x 3 1/2"x 3/8"x 3 6 7/8	ST298
CONNECTION BAR	CB1	2	1" ● x 1'-3"	ST400
CONNECTION PLATES	P1	3	3 1/2"x 3/8"x 0'-6 1/2"	ST400
	P2	2	4 1/2"x .39"x 0'-9"	ST400
CONNECTION PLATES ⚠	P7	2	3 1/2"x 1/2"x 1'-0"	ST401

NO.	DATE	REVISION	BY
⚠	10-16-68	LIST OF MATERIAL	G.D.C.

REF DWGS

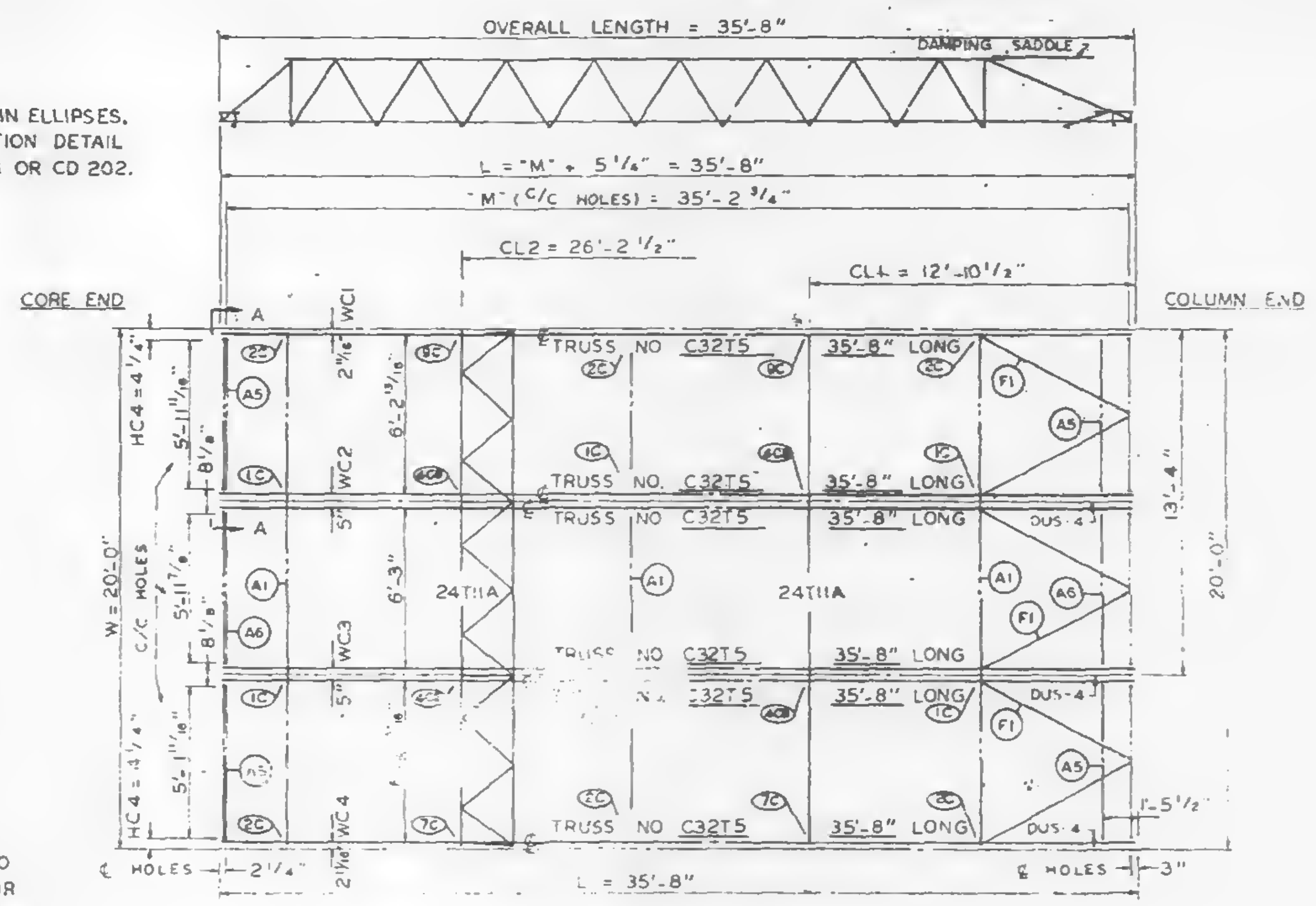
2 AB4 3 & 31	[illegible] 5 68
2 AB4 5 & 16	5 6 68
2 AB4 39 41	[illegible] 3 68
5[illegible] 24	10 20 5[illegible]
2 AB3 [illegible]	[illegible] 1 68
2 AB1 [illegible]	5 10 68
2 AB2 5	2 15 68
2 AB4 42	4 1 68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40 (EAST & WEST) 46-49, 50-58, 60-66, 68-74 (EAST) PANEL HR1 20'-0" x 35'-8"

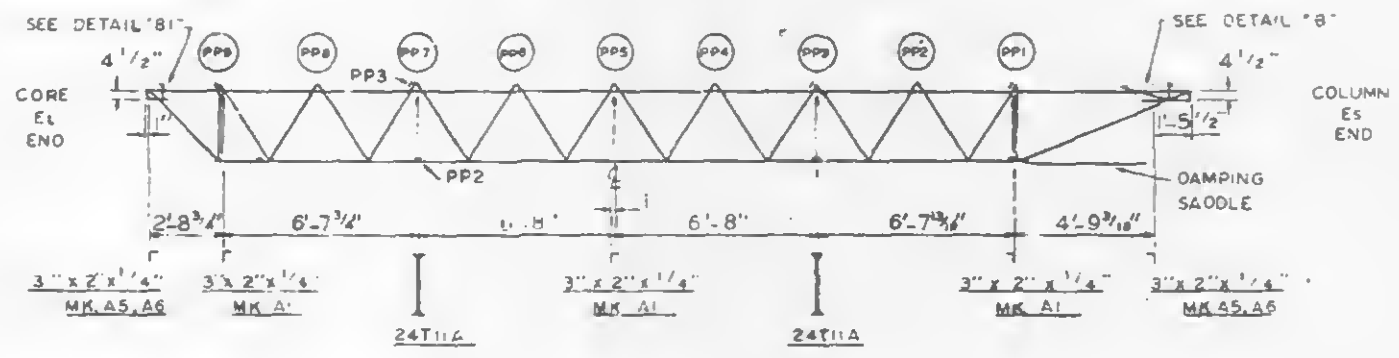
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 2 AB3-18 5-10-68 PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 10/21/68
DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR DATE ______
CHECKED BY T.M. CHURA DATE APRIL 10, 1968
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-HR1

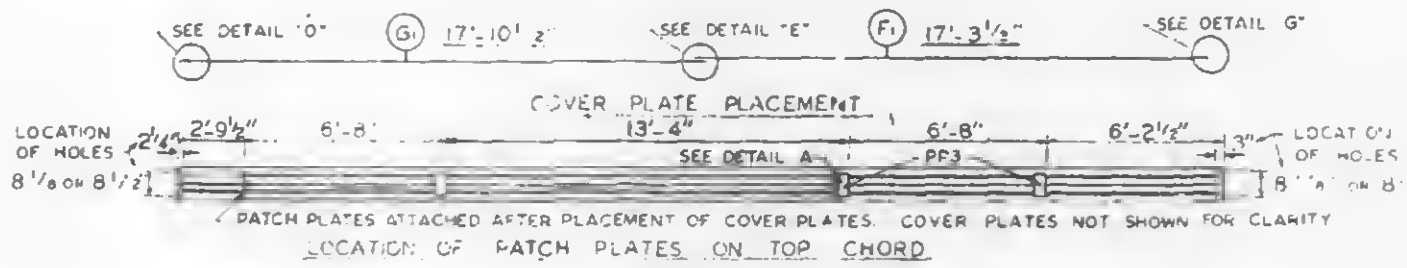
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



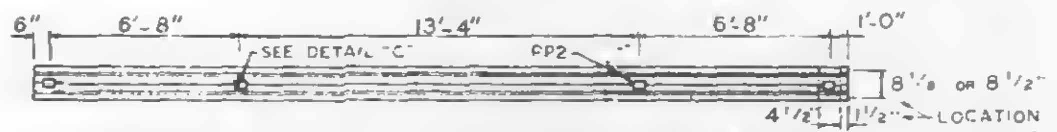
PANEL NO HRI SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

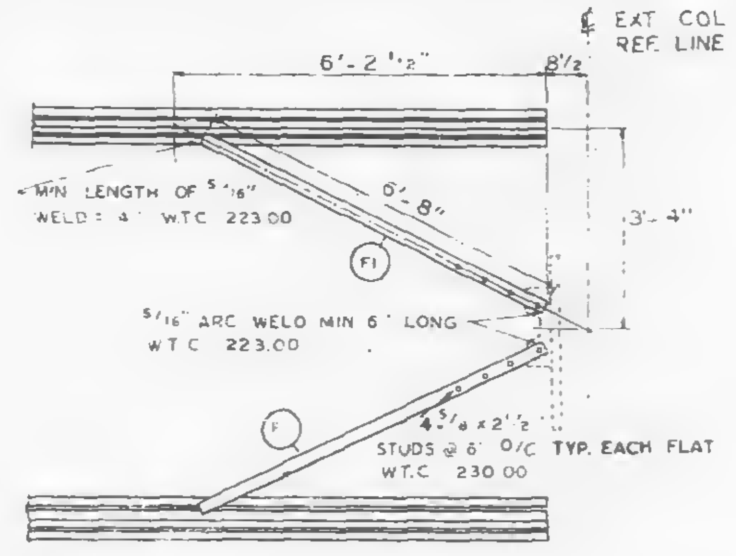




LOCATION OF PATCH PLATES ON TOP CHORD

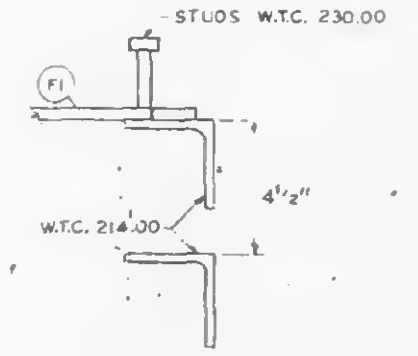


LOCATION OF PATCH PLATES ON BOTTOM CHORD



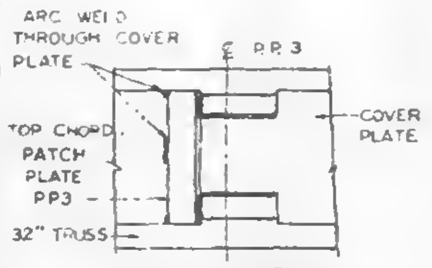
℄ EXT. COL REF. LINE
6'-2 1/2"
8 1/2"
3'-4"
6'-8"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
4 1/2 x 2 1/2
STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

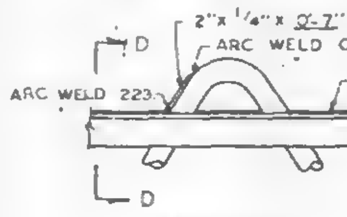


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

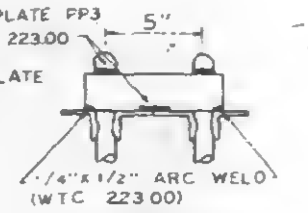
REQUIRED MATERIAL PER PANEL MATERIAL	MK	PCS	SIZE	REF. DRWG
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	BT211A
3" x 2" x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST 403
	A5	4	3"x2"x1/4"x 6'-4 13/16"	ST 403
	A6	2	3"x2"x1/4"x 5'-2"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 5/8"x 6'-8"	ST 402
PATCH PLATES	PP3	12	2"x 1/4" x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7" x .0135" x 17'-10 1/2"	ST 303
	F1	3	7" x .0135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	2	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3 1/2" x 3 1/2" x 3/8" x 1'-6 7/8"	ST298
CONNECTION BAR	CB1	2	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P3	2	4 1/2" x .39" x 1'-0"	ST 400



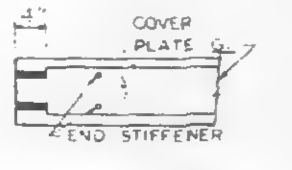
TOP VIEW - DETAIL "A"



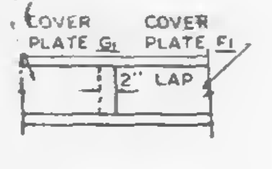
DETAIL "A"



SECTION D-D

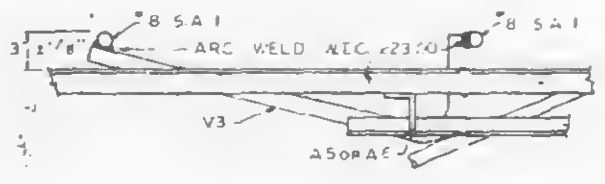


DETAIL "D"

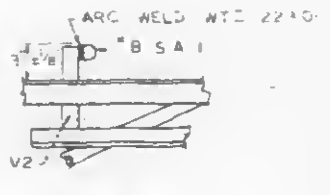


DETAIL "E"

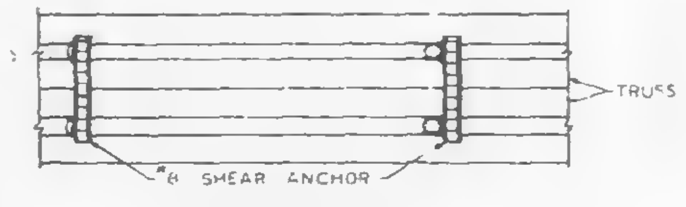
COVER PLATES 29 GA THICK



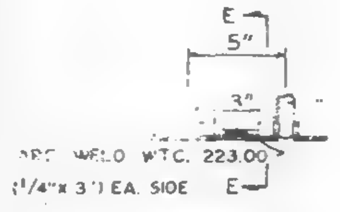
DETAIL "B"



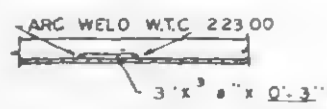
DETAIL "B1"



TOP VIEW - DETAIL "B"

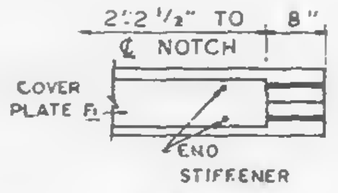


DETAIL "C"

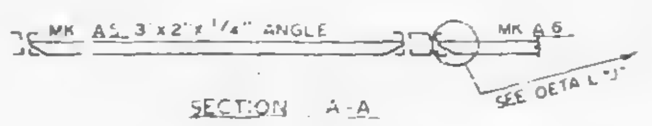


SECTION E-E

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

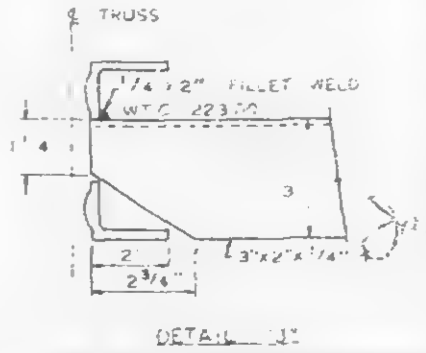


DETAIL "G"



SECTION A-A

END SUPPORT ANGLES



DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

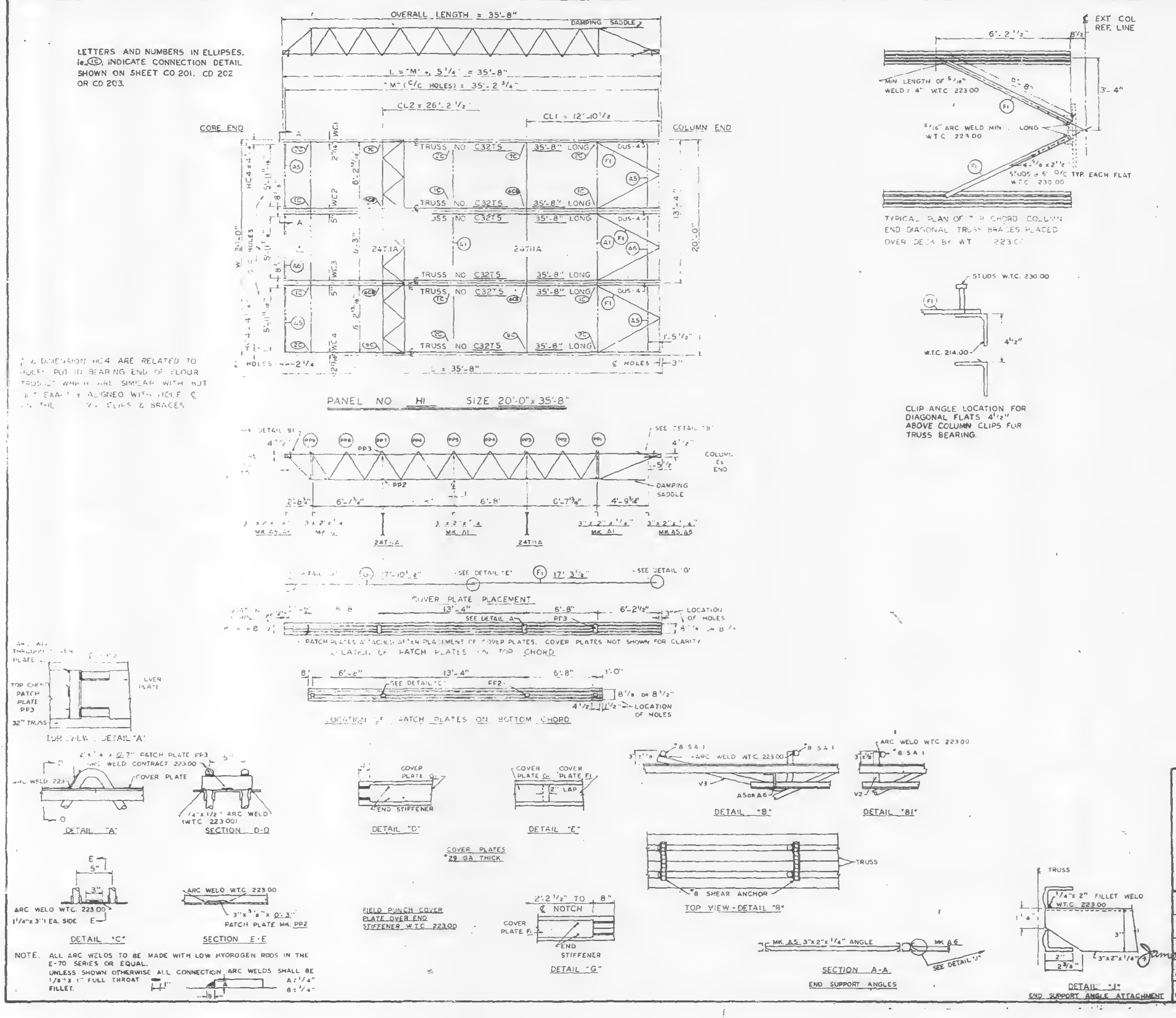
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40 (EAST & WEST) 46-48, 50-58, 60-66, 68-74 (EAST)
PANEL HRI 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7 AB3-16 5-10-68	DATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. — DATE 8/16/68	DRAWN BY	
APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE	CHECKED BY T.V.	
DETAILED BY A.C. WEBER	FABRICATION CONT. N. W.T.C. 221	SHEET NO. FP-HRI

LETTERS AND NUMBERS IN ELLIPSES, ie.(1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CO 201, CD 202 OR CD 203.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ IN THE [illegible] CLIPS & BRACES

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/8" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-1"	ST 403
	A5	4	3"x2"x1/4"x 6'-3 13/16"	ST403
	A6	2	3"x2"x1/4"x 6'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2"x5/8"x 5'-8"	ST402
PATCH PLATES	PP3	12	2"x1/4"x 0'-7"	ST 400
	PP2	12	3"x3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x 0135"x 17'-10 1/2"	ST303
	F1	3	7"x 0135"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2"x1 1/2"x1/4"x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE △1	DUS-4	3	3 1/2"x3 1/2"x3/8"x 3 6 7/8"	ST298
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES △1	P1	3	3 1/2"x3/8"x 0'-6 1/2"	ST 400
	P2	2	4 1/2"x .39"x 0'-9"	ST 400
	P7	2	6 1/2"x1/2"x 1'-0"	ST 401

NO.	DATE	REVISION	BY
△1	10-16-68	MATERIAL LIST	G.D.C.

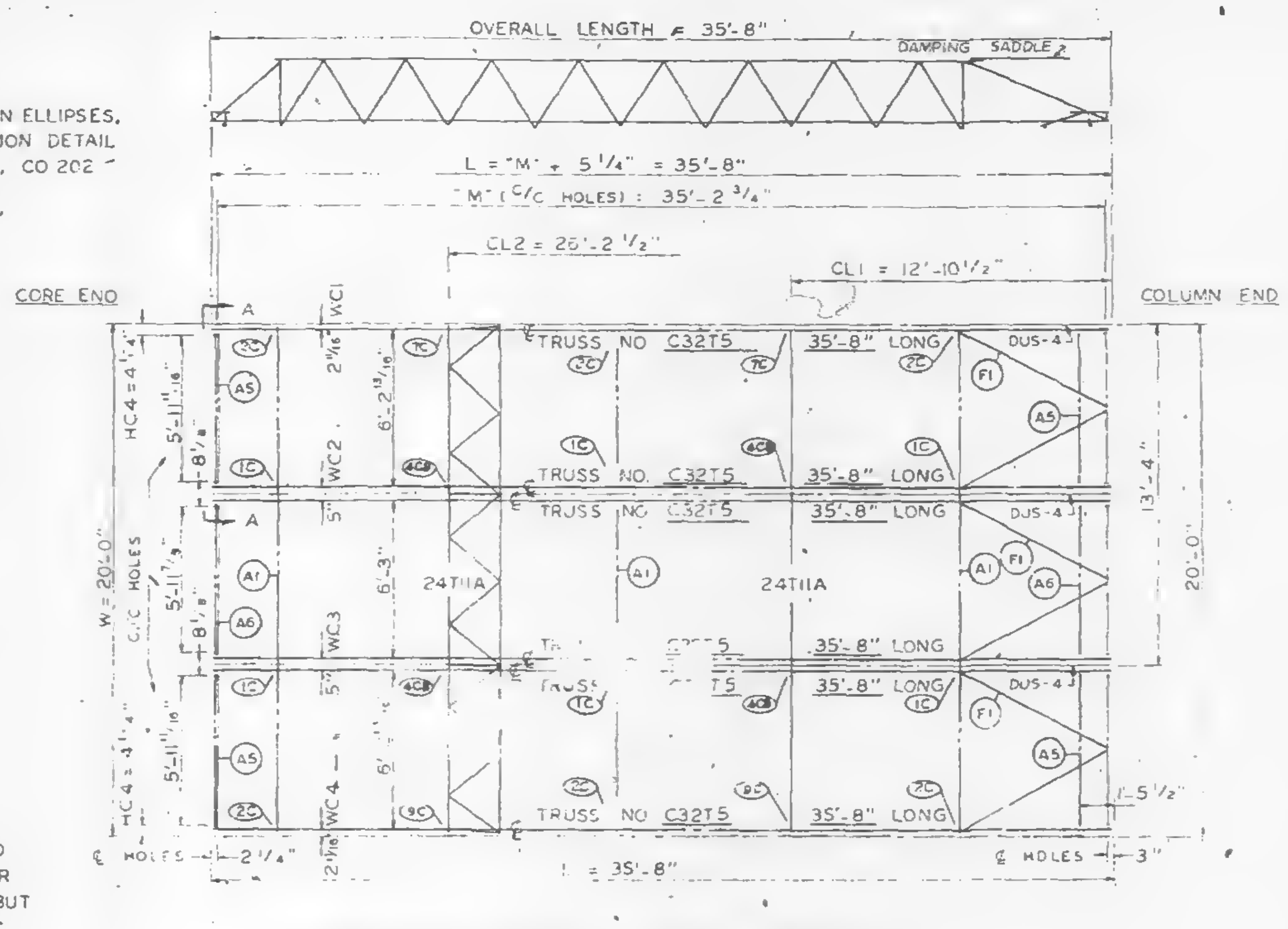
REF. DRWG	
7-A84-7 & 31	1-3-68
7-A84-15 & 16	5-6-68
7-A64-39-41	1-3-68
SA-124	10-20-67
7-A83-2	1-3-68
7-A81-11 & 12	5-10-68
7-A82-6	2-15-66
7-A84-42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 &
93-106 (EAST & WEST) PANEL H1 - 20'-0" x 35'-8"
45-49 (WEST) 80-83 (EAST)

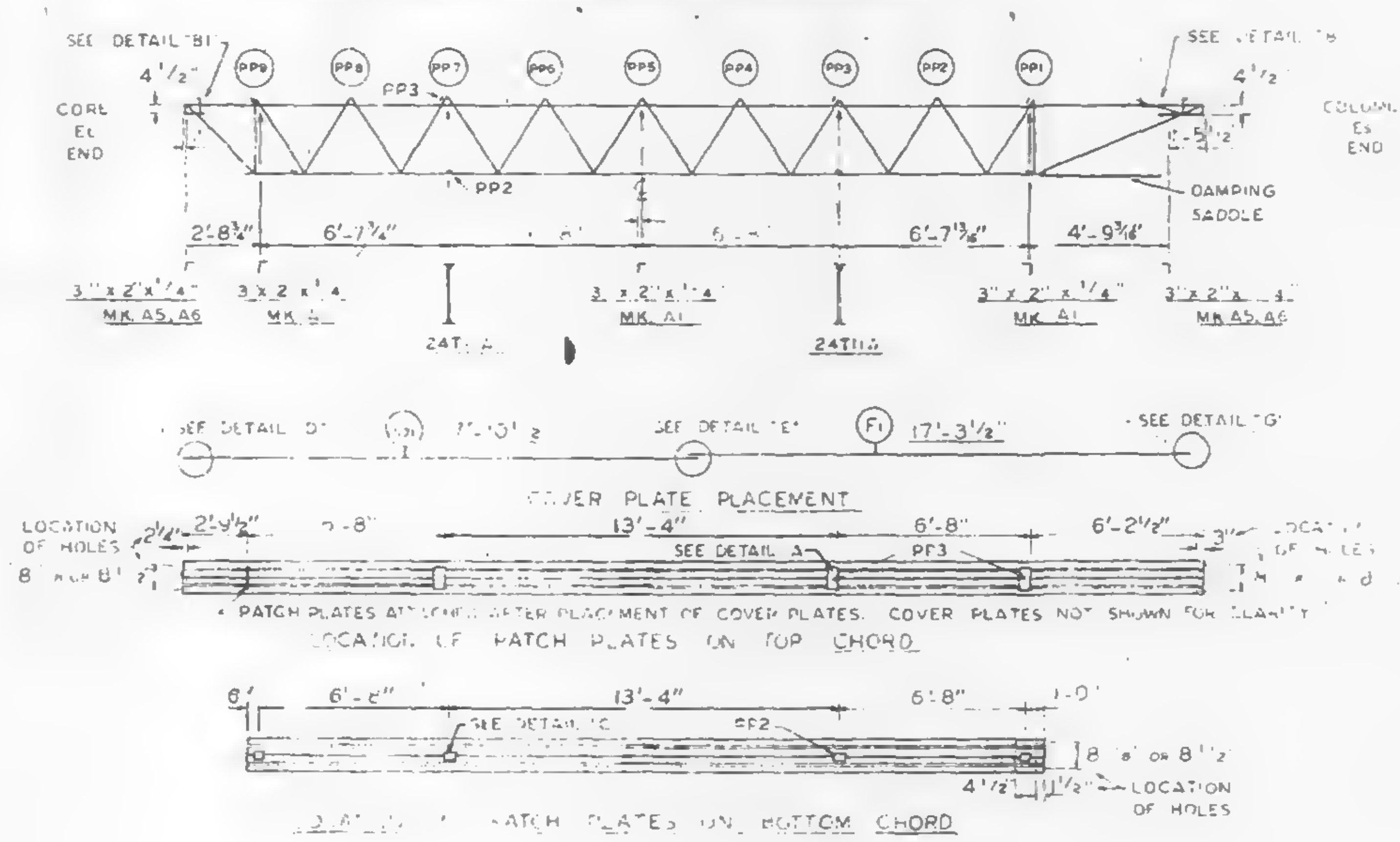
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-17 5-10-68 PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. DATE 10/21/68
DRAWN BY R.B. DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 10, 1968
LACLEDE STEEL CO.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-H1

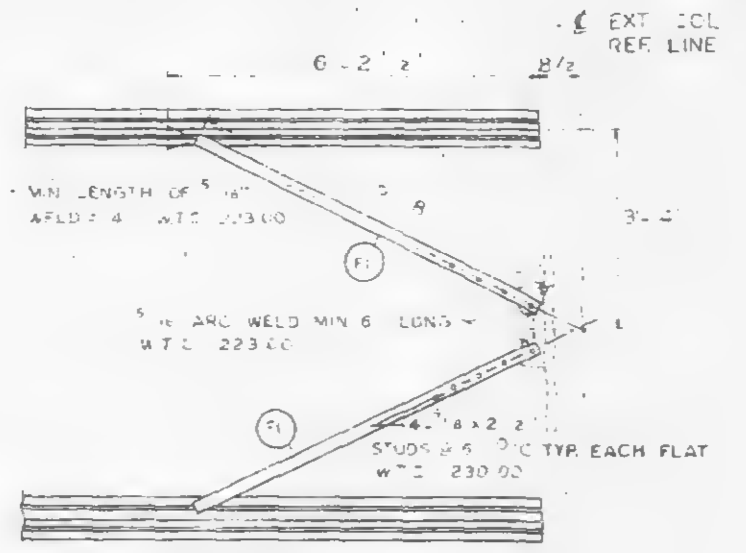
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD 202 OR CD 203.



PANEL NO H1 SIZE 20'-0" x 35'-8"

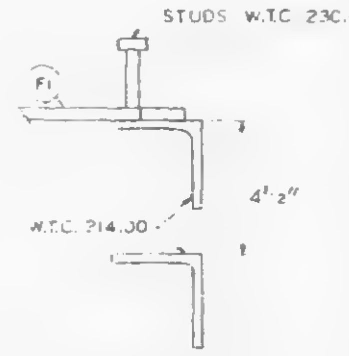
℄ - DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES





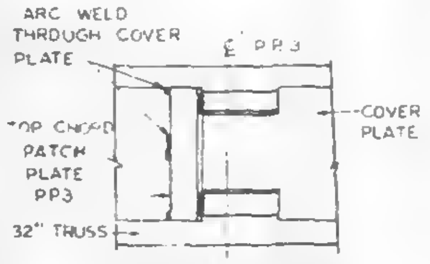
℄ EXT. COL. REF. LINE
6'-2 1/2"
MIN LENGTH OF 5/16" AFLD 2 4 W.T.C. 223.00
3'-4"
F1
ARC WELD MIN 6" LONG W.T.C. 223.00
STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLATED OVER DECK BY W.T.C. 224.0

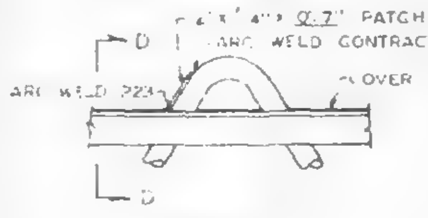


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

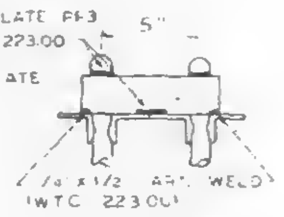
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES.	T11A	2	2T11A - 19'-11"	BT211A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST403
	A5	4	3" x 2" x 1/4" x 6'-1 13/16"	ST403
	A6	2	3" x 2" x 1/4" x 6'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	3	7" x 0.135" x 17'-10 1/2"	ST303
	F1	3	7" x 0.135" x 7'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DJS-4	4	3 1/2" x 3 1/2" x 3/8" x 3 6 7/8"	ST298
[illegible] BAR	CB1	2	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	F1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P3	2	4 1/2" x .39" x 1'-0"	ST 400



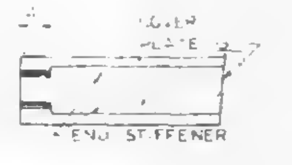
TOP VIEW - DETAIL 'A'



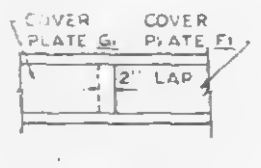
DETAIL 'A'



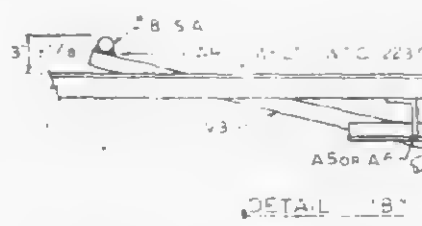
SECTION



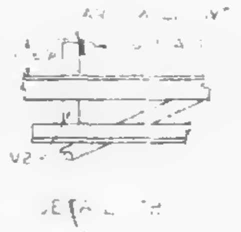
DETAIL 'C'



DETAIL 'E'

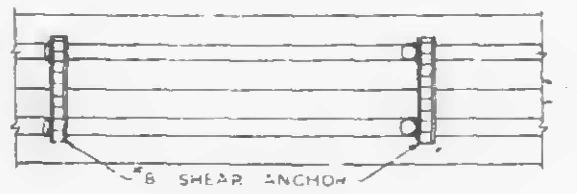


DETAIL 'B'



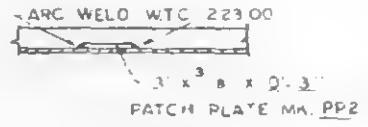
DETAIL 'B'

COVER PLATES 29 GA THICK



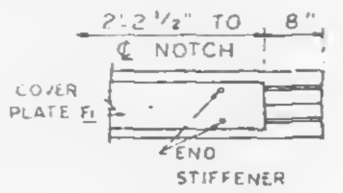
TOP VIEW - DETAIL 'B'

DETAIL 'C'

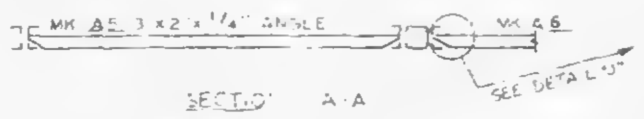


SECTION E-E

FIELD PLUG COVER PLATE OVER END STIFFENER W.T.C. 223.00

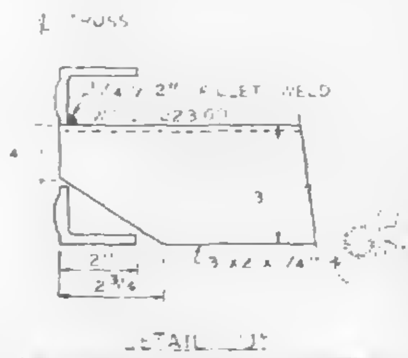


DETAIL 'G'



SECTION A-A

END SUPPORT ANGLES



DETAIL 'D'

END SUPPORT ANGLE ATTACHMENT

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4
B = 1/4

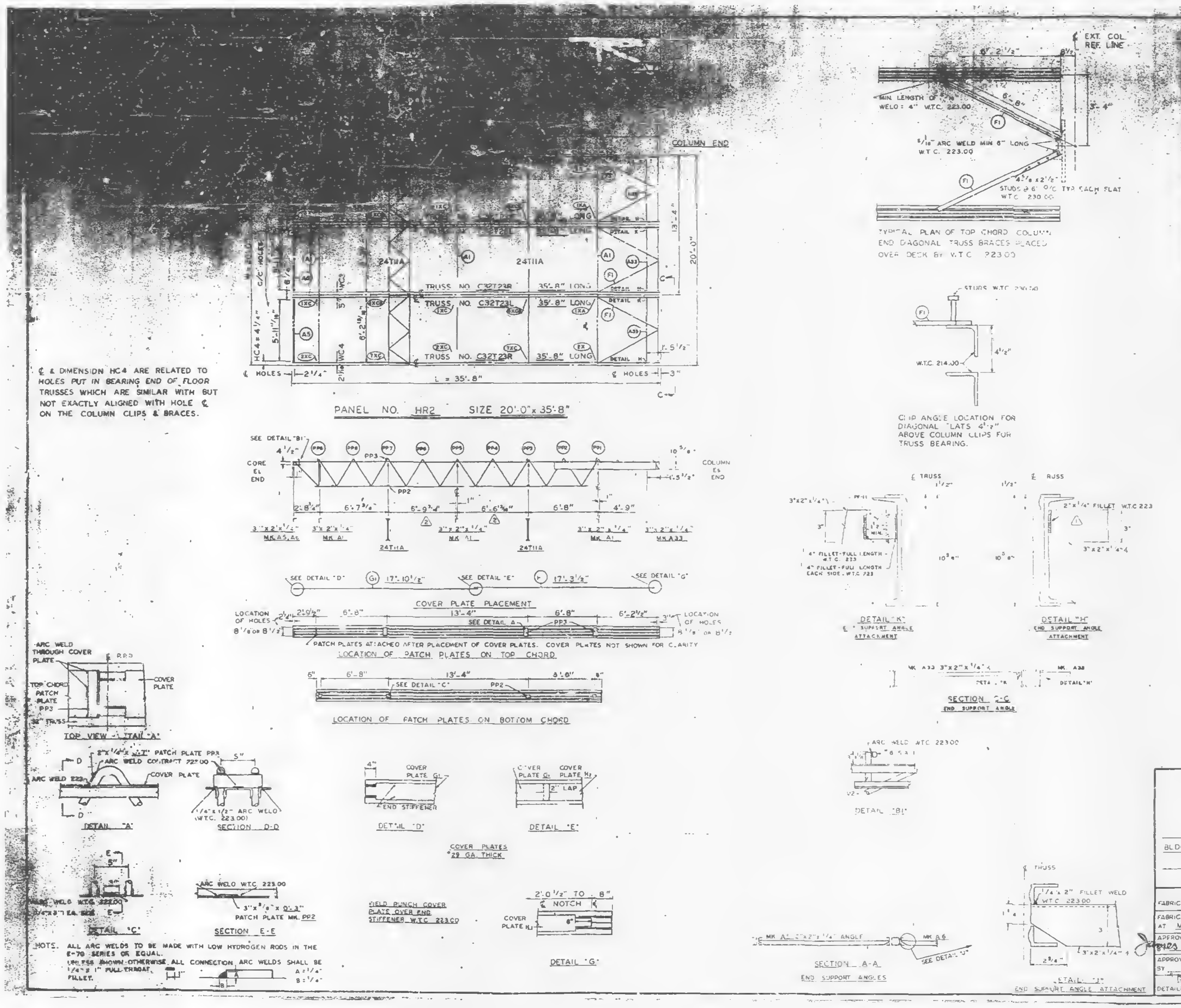
REF DWG	
7 AB4 3 & 3	1 3 68
7 AB4 5 & 6	5 6 68
7 AB4 39 41	1-3-68
SA 124	10 20 67
7 AB3 2	1 3 68
7 AB1 11 & 12	5 10 68
7 AB2 6	2 15 68
7 AB4 42	4 1 68

H PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 25-40, 50-58, 60-66, 68-74, 84-91 &
93-106 (EAST & WEST) PANEL H1 20'-0" x 35'-8"
45-49 (WEST) 80-83 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7 AB3-17 5-10-68 PLATE	
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE 8/19/68	DRAWN BY DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 10, 1968	
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP-H1


COLUMN END
TRUSS NO. C32T23R 35'-8" LONG
TRUSS NO. C32T23L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
24T11A
L = 35'-8"
℄ HOLES
HC4 = 4 1/4"
WC4
20'-0"
PANEL NO. HR2 SIZE 20'-0" x 35'-8"
SEE DETAIL "B1"
CORE EL END
COLUMN EL END
PP3
PP2
3"x2"x1/4" MK A5, A6
3"x2"x1/4" MK A1
3"x2"x1/4" MK A33
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
17'-10 1/2"
17'-3 1/2"
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE PP3
COVER PLATE
32" TRUSS
TOP VIEW - DETAIL "A"
2"x1/4"x0'-7" PATCH PLATE PP3
ARC WELD CONTRACT 223.00
DETAIL "A"
1/4"x1 1/2" ARC WELD (W.T.C. 223.00)
SECTION D-D
END STIFFENER
DETAIL "D"
COVER PLATE G1
COVER PLATE H1
2" LAP
DETAIL "E"
COVER PLATES 29 GA. THICK
ARC WELD W.T.C. 223.00
DETAIL "C"
ARC WELD W.T.C. 223.00
3"x3/8"x0'-3"
PATCH PLATE MK. PP2
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
2'-0 1/2" TO 8"
NOTCH
COVER PLATE H1
DETAIL "G"
EXT. COL. REF. LINE
MIN LENGTH OF WELD: 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
℄ TRUSS
4" FILLET-FULL LENGTH W.T.C. 223
4" FILLET-FULL LENGTH EACH SIDE. W.T.C. 223
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET W.T.C. 223
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT
MK A33 3"x2"x1/4"
SECTION C-C
END SUPPORT ANGLE
ARC WELD W.T.C. 223.00
DETAIL "B1"
MK A5 3"x2"x1/4" ANGLE
MK A6
SEE DETAIL "J"
SECTION A-A
END SUPPORT ANGLES
1/4"x2" FILLET WELD W.T.C. 223.00
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET. A = 1/4" B = 1/4"

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3"x2"x1/4" ANGLE	A1	3	[illegible]	[illegible]
	A5	2	[illegible]	[illegible]
	A6	1	[illegible]	[illegible]
	A33	3	3"x2"x1/4"x3'-9 1/2"	ST 410
PATCH PLATES	PP3	12	2"x1/4"x0'-7"	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
COVER PLATES	G1	3	7"x.0135"x17'-10 1/2"	ST 303
	H1	3	7"x.0135"x17'-3 1/2"	ST 303
[illegible] CLIPS	C2	12	2 1/2"x1 1/2"x1/4"x6"	ST 40[illegible]
#8 SHEAR ANCHOR	SA1	3	#6 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	6	1 1/8"x3/8"x 1'-6"	ST 402
CONNECTION BAR	CB1	3	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3 1/2"x3/8"x0'-6 1/2"	ST 400
	P2	2	4 1/2"x.39"x0'-9"	ST 400
	P7	2	6 1/2"x.50"x1'-0"	ST 401
CLOSURE PLATE	PF11	3	3"x1/4"x0'-2 3/8"	ST 412

NO	DATE	REVISION	BY
2	3-11-69	AS NOTED	G.D.C
1	2-5-69	AS NOTED	G.D.C

REF DRWG	
7-AB4-3	10-6-68
7-AB4-15 & 16	7-22-69
7-AB4-15 2	10-4-68
SA-124	10-11-68
7-AB3-39	10-4-68
7-AB1-22	10-4-68
7-AB2-6	7-22-66

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

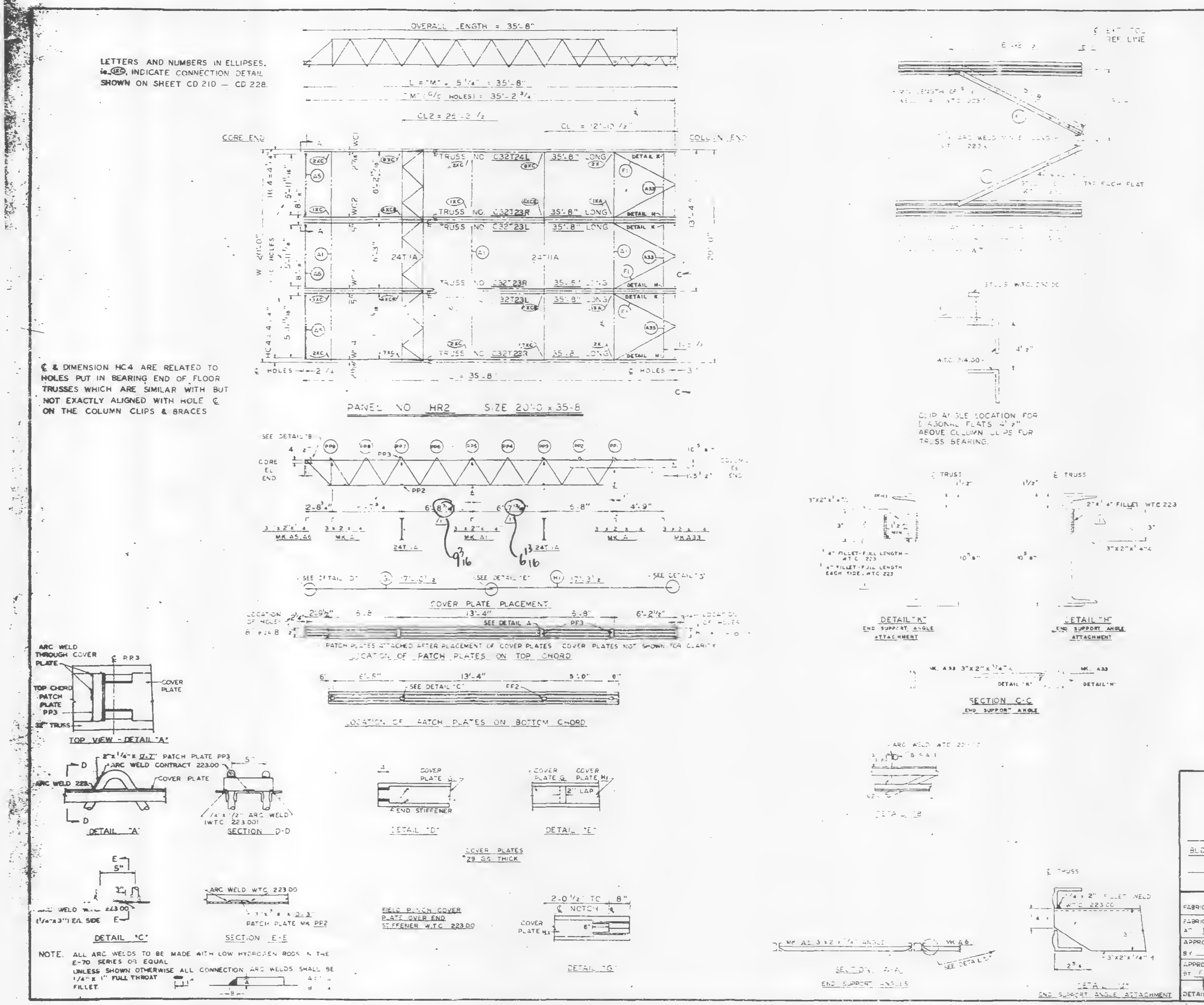
BLDG A FLOORS 25, 59, 92, (EAST & WEST)
PANEL HR2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-39	PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A.	DATE 3/24/69	DRAWN BY [illegible] DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE JAN 3, 1969	
DETAILED BY A. C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP-HR2

LETTERS AND NUMBERS IN ELLIPSES, ie. (2XC) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
CORE END
COLUMN END
TRUSS NO C32T24L 35'-8" LONG
TRUSS NO C32T23R 35'-8" LONG
TRUSS NO C32T23L 35'-8" LONG
24T11A
DETAIL K
DETAIL H
PANEL NO HR2 SIZE 20'-0 x 35'-8
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES #29 GA THICK
DETAIL "C"
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C 223.00
DETAIL "G"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "B"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T23L	2	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST 223L
	T24L	1	C32T24L - 35'-8"	ST 224L
BRIDGING TRUSSES	T11A	2	24T11A - 19'-11"	BT211A
3"x 2" x 1/4" ANGLE	A1	3	3"x 2"x 1/4" x 19'-11"	ST 403
	A5	2	3"x 2"x 1/4" x 6'-1 13/16"	ST 403
	A6	1	3"x 2"x 1/4" x 6'-2"	ST 403
	A33	3	3"x 2"x 1/4" x 5'-10 1/2"	ST 410
PATCH PLATES	PP3	12	2"x 1/4"x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G	3	7"x 0.135"x 17'-10 1/2"	ST 303
	H	3	7"x 0.135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2"x 1 1/2 x 1/4"x 6"	ST 400
#5 SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	6	1 1/2"x 3/8"x 6'-8"	ST 402
CONNECTION BAR	CB1	3	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	2	4 1/2"x .39"x 0'-9"	ST 400
	P7	2	6 1/2"x .50"x 1'-0"	ST 401
CLOSURE PLATE	PF11	3	3"x 1/4"x 0'-2 3/8"	ST 412

NO.	DATE	REVISION	BY
1	2-5-69	AS NOTED	G.B.C.

REF DRWG	
7-AB4-3	10-5-68
7-AB4-15 & 16	7-22-68
7-AB4-15.2	10-4-68
SA-124	10-11-68
7-AB3-39	10-4-68
7-AB1-22	10-4-68
7-AB2-6	7-22-68

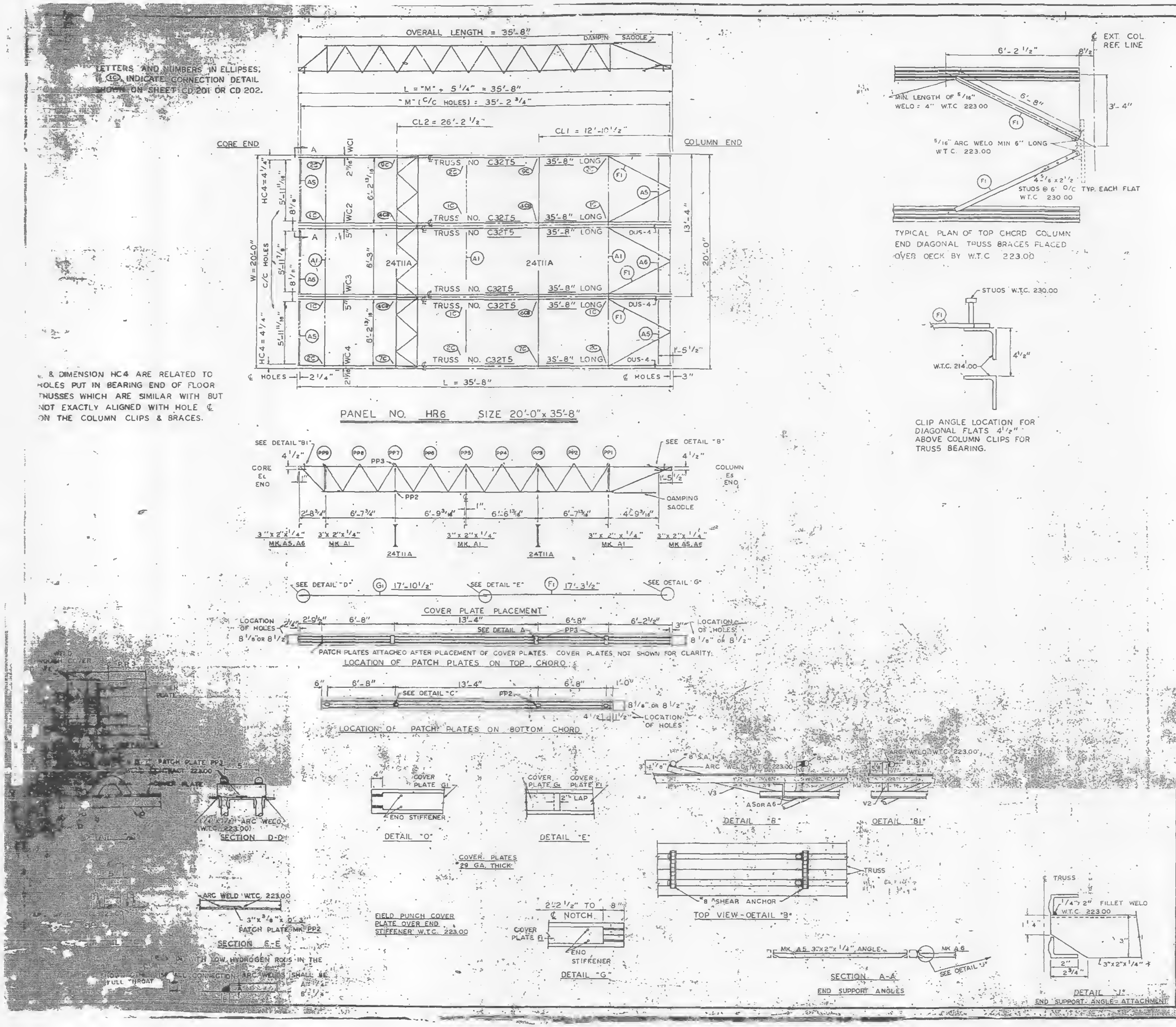
SKILLING-HELLE CHRISTIANSEN-ROBERTSON Structural & Civil Engineers
2/28/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. Y. C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92, (EAST & WEST)
PANEL HR2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-39	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE	DRAWN BY DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR LACLEDE STEEL	DATE	CHECKED BY T.M. CHUBA DATE JAN 3, 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP-HR2


OVERALL LENGTH = 35'-8"
DAMPING SADDLE
LETTERS AND NUMBERS IN ELLIPSES, (1C) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) : 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO C32T5 35'-8" LONG
24T11A
W = 20'-0"
C/C HOLES
HC4 = 4 1/4"
13'-4"
20'-0"
L = 35'-8"
℄ HOLES
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. HR6 SIZE 20'-0" x 35'-8"
6'-2 1/2"
EXT. COL REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
4 3/16 x 2 1/2 STUDS @ 6" O/C TYP. EACH FLAT W.T.C 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B1"
SEE DETAIL "B"
CORE EL END
COLUMN EL END
DAMPING SADDLE
3"x 2"x 1/4" MK A5, A6
3"x 2"x 1/4" MK A1
24T11A
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
17'-10 1/2"
17'-3 1/2"
COVER PLATE PLACEMENT
LOCATION OF HOLES 8 1/8" OR 8 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SECTION D-D
END STIFFENER
DETAIL "D"
DETAIL "E"
DETAIL "B"
DETAIL "B1"
COVER PLATES 29 GA. THICK
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
2 1/2" TO 8" ℄ NOTCH
END STIFFENER
DETAIL "G"
"8 SHEAR ANCHOR
TOP VIEW-DETAIL "B"
TRUSS
MK A5 3"x2"x1/4" ANGLE
SEE DETAIL "J"
SECTION A-A
END SUPPORT ANGLES
1/4" 2" FILLET WELD W.T.C. 223.00
3"x2"x1/4"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
ARC WELD W.T.C. 223.00
3"x3/8"x 0'-3" PATCH PLATE MK PP2
SECTION E-E

REQUIRED MATERIAL PER PANEL MATERIAL	MK	PCS	SIZE	REF. DRWG
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	BT211A
3"x 2"x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST 403
	A5	4	3"x2"x1/4"x 6'-1 9/16"	ST403
	A5	2	3"x2"x1/4"x 6'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2"x 5/8"x 6'-8"	ST402
PATCH PLATES	PP3	12	2"x 1/4"x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x 0135"x 17'-10 1/2"	ST 303
	F1	3	7"x.0135"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2"x 1 1/2"x 1/4"x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST29B
CONNECTION BAR	CB1	2	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	2	4 1/2"x .39"x 0'-9"	ST 400
	P7	2	6 1/2"x 1/2"x 1'-0"	ST 401

1'-0"

0'-8"

NO.	DATE	REVISION	BY

REF. DRWG.	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-6	7-22-68
7-AB4-42	10-15-68

SKILLING · HELLE
CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 7/31/

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-74 (WEST) 84-91, 93-106 (EAST & WEST)

PANEL HR6 - 20'-0" x 35'-8"

BLDG. B FLOORS 50-58, 60-74 (SOUTH) 84-91, 93 [illegible] (NORTH & SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-18 PLATE

APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A. DATE

DRAWN BY [illegible]
DATE MAY 8, 1969

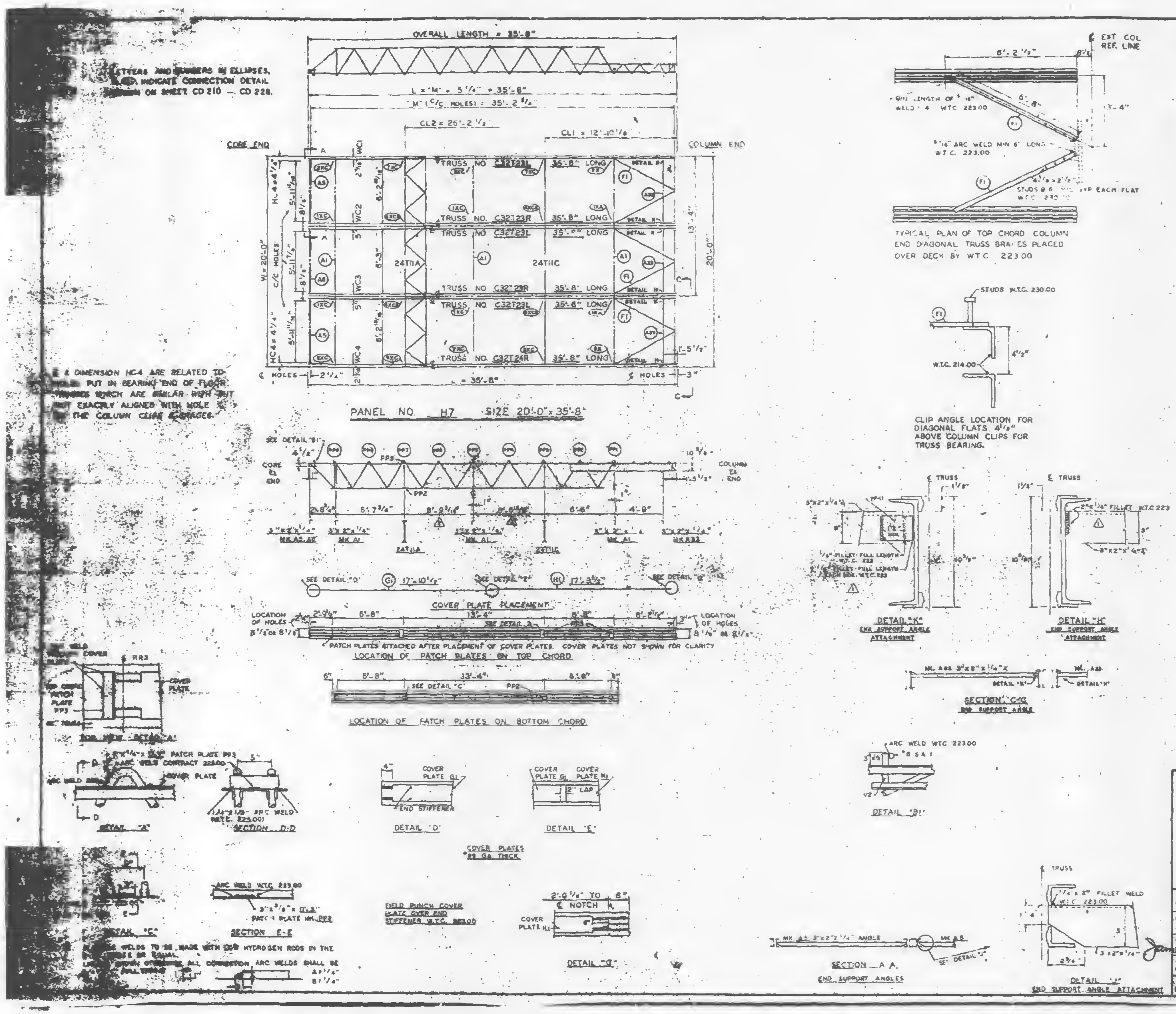
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. DATE

CHECKED BY T.M. CHURA
DATE MAY 8, 1969

DETAILED BY A.C. WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FP-HR6



[illegible]TTERS AND NUMBERS IN ELLIPSES, [illegible] INDICATE CONNECTION DETAIL [illegible] ON SHEET CD 210 — CD 228.
OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/8
CORE END
COLUMN END
TRUSS NO. C32T23L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
TRUSS NO. C32T24R 35'-8" LONG
24T11A
24T11C
W = 20'-0"
C/C HOLES
13'-4"
20'-0"
L = 35'-8"
[illegible] & DIMENSION HC-4 ARE RELATED TO [illegible] PUT IN BEARING END OF FLOOR [illegible] WHICH ARE SIMILAR WITH BUT [illegible] EXACTLY ALIGNED WITH HOLE [illegible] THE COLUMN CLIPS & BRACES.
PANEL NO. H7 SIZE 20'-0" x 35'-8"
SEE DETAIL "B1"
CORE END
COLUMN END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
EXT COL REF. LINE
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
STUDS W.T.C. 230.00
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "B1"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES 22 GA. THICK
DETAIL "C"
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL "G"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
[illegible] WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] OR EQUAL.
[illegible] SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible]
A = 3/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	SHT.
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST 23L
	T23R	2	C32T23R - 35'-8"	ST [illegible]
	T24R	1	C32T24R - 35'-8"	ST [illegible]
BRIDGING TRUSSES	T11C	1	24 T11C - [illegible]'-11"	ST 11C
	T11A	1	24T11A - 18'-11"	ST 211A
3"x 2"x 1/4" ANGLE	A1	3	3"x 2"x 1/4" x 19'-11"	ST 403
	A3	2	3"x 2"x 1/4" x 6'-[illegible]"	ST 403
	A6	1	3"x 2"x 1/4" x 6'-2"	ST 403
	A33	3	3"x 2"x 1/4" x 5'-10 1/2"	ST 410
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	3	17"x .0[illegible]" x [illegible]'-10 1/2"	ST [illegible]
	H1	3	[illegible]" x .0[illegible]" x 17'-3 1/2"	ST [illegible]
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 8"	ST 400
SHEAR ANCHOR	SA1	3	8 REBAR x 0'-7	ST 400
DIAGONAL FLATS	F1	8	1 1/2" x 3/8" x 6'-8"	ST 400
CONNECTION BAR	CB1	3	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3 1/2" x 3/8" x 0'-5 1/2"	ST 400
	P2	2	4 1/2" x .30" x 0'-8"	ST 400
	P7	2	6 1/2" x .50" x 1'-8"	ST 401
CLOSURE PLATE	[illegible]	3	[illegible] x 0'-2 [illegible]	ST [illegible]

NO.	DATE	REVISION	
2	3-11-69	AS NOTED	[illegible]
1	2-4-69	AS NOTED	[illegible]

REF. DRWG.

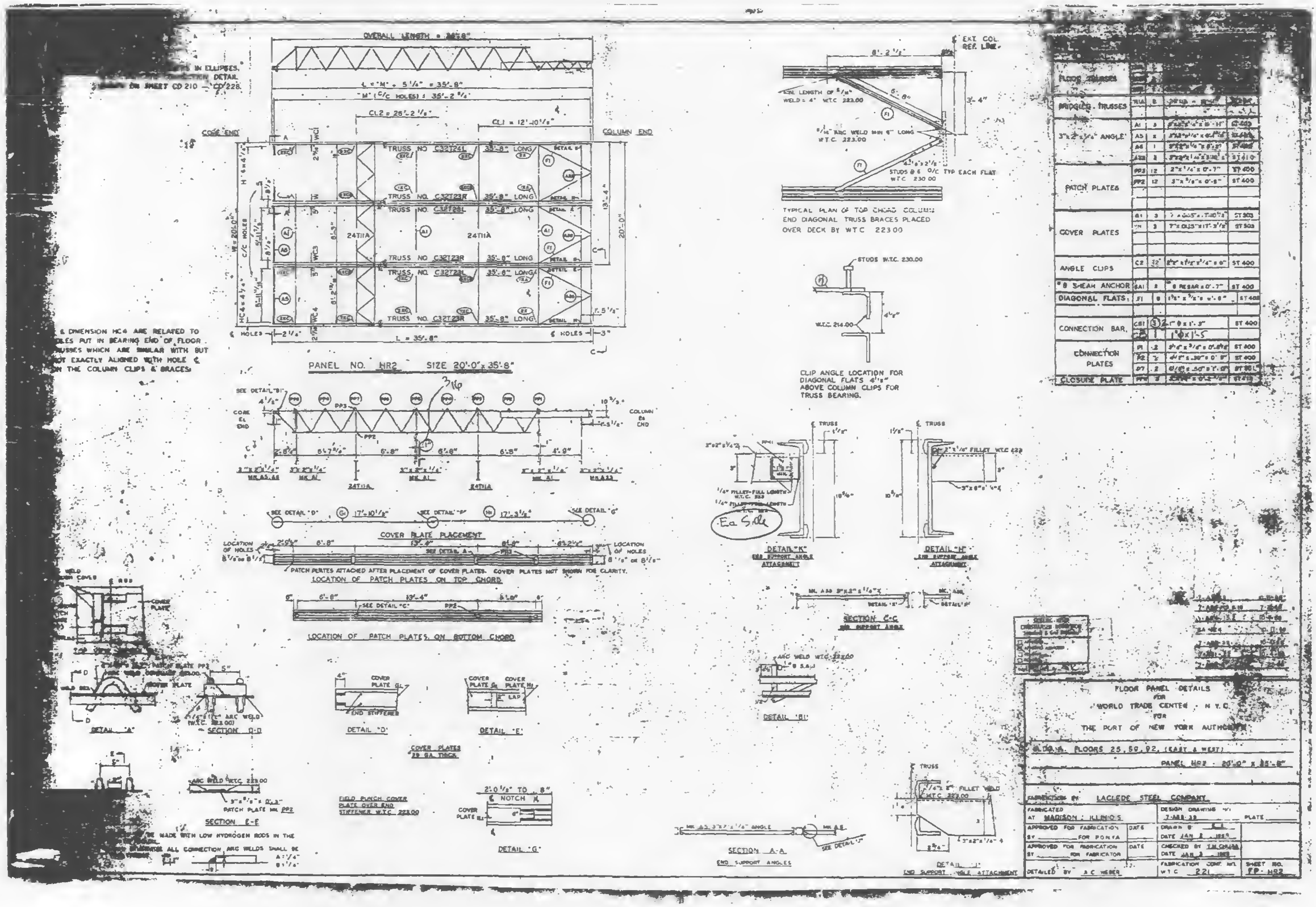
7-AB4-3	[illegible]
7-AB4-15 & 16	7-22-68
7-AB4-15.2	10-4-68
SA-124	10-11-68
7-AB3-38	10-4-68
7-AB1-22	10-4-68
7-AB2-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92. (EAST & WEST)

PANEL H7 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. [illegible]-AB3-38	PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 3/14/69	DRAWN BY [illegible] DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. OKURA DATE JAN 3, 1969	
LACLEDE STEEL CO. DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET [illegible] FP-H7


OVERALL LENGTH = 35'-8"
℄ = "M" + 5 1/4" = 35'-8"
"M" C/C HOLES = 35'-2 5/8"
CL2 = 28'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T24L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
TRUSS NO. C32T28L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
TRUSS NO. C32T23L 35'-8" LONG
TRUSS NO. C32T22R 35'-8" LONG
24T11A
20'-0"
L = 35'-8"
HOLES
PANEL NO. HR2 SIZE 20'-0" x 35'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
SECTION E-E
DETAIL "G"
DETAIL "K"
DETAIL "H"
SECTION C-C
DETAIL "B"
SECTION A-A
DETAIL "J"
Ea Side

DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

COVER PLATES 29 GA. THICK

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

WADE WITH LOW HYDROGEN RODS IN THE ALL CONNECTION ARC WELDS SHALL BE

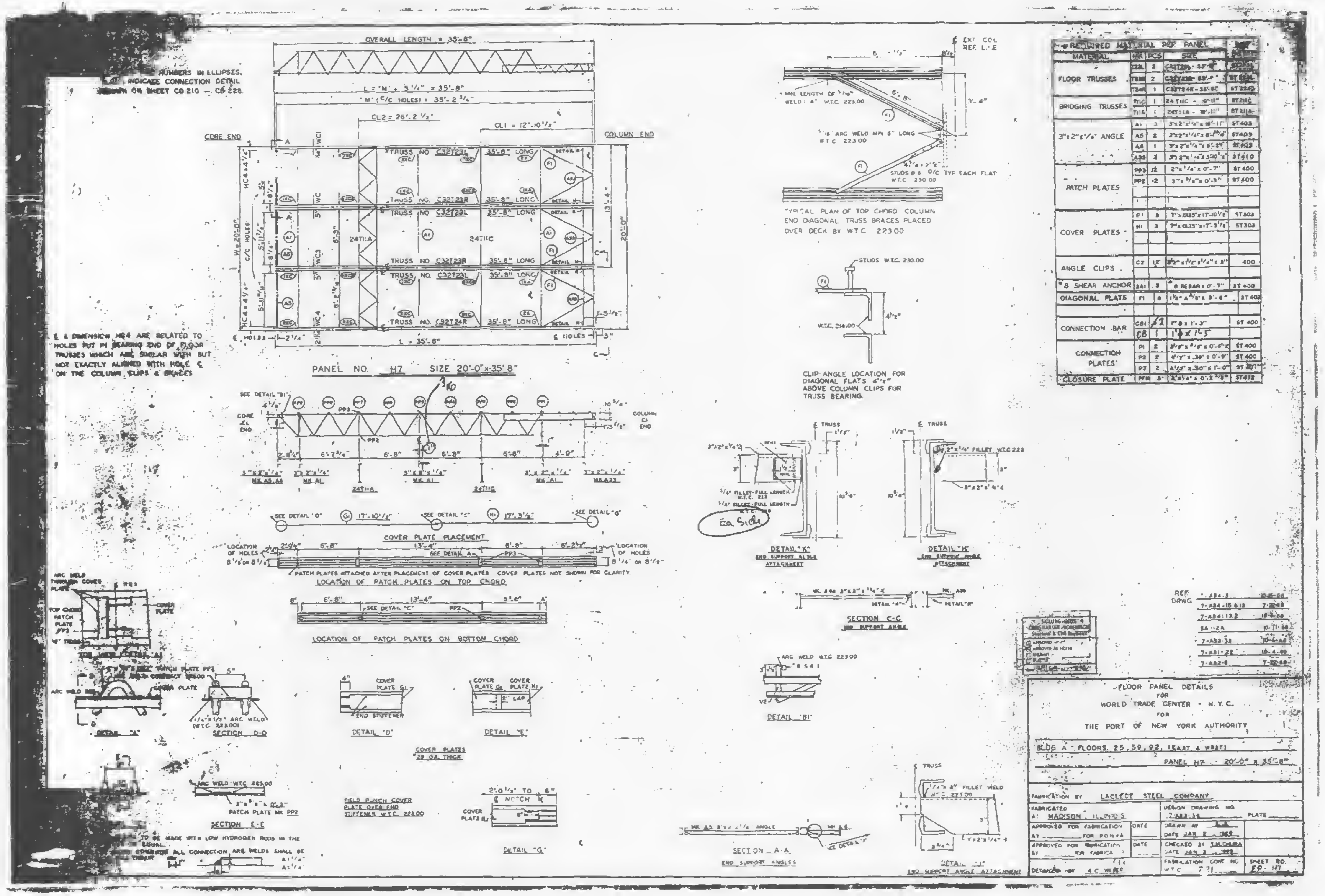
FLOOR TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING TRUSSES	T11A	8	24T11A - [illegible]	[illegible]
3"x2"x3/16" ANGLE	A1	3	[illegible]	ST 400
	A5	2	[illegible]	ST 400
	A6	1	[illegible]	ST 400
	A22	2	[illegible]	ST 410
PATCH PLATES	PP3	12	2"x 1/4"x 0'-7"	ST 400
	PP2	12	3"x 5/8"x 0'-8"	ST 400
COVER PLATES	G1	3	7"x 0.025"x [illegible]	ST 303
	H1	3	7"x 0.025"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	32	[illegible]	ST 400
#8 SHEAR ANCHOR	SA1	8	#8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS.	F1	8	1 1/2" x 5/8" x [illegible]	ST 400
CONNECTION BAR.	CB1	③ 2	1" Φ x 1'-3"	ST 400
	CB2	1	1"Φ x 1'-5	
CONNECTION PLATES	P1	2	[illegible]	ST 400
	P2	2	[illegible]	ST 400
	P7	2	[illegible]	[illegible]
CLOSURE PLATE	PP4	3	[illegible]	ST 412

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A. FLOORS 25, 59, 92, (EAST & WEST)
PANEL HR2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON : ILLINOIS		DESIGN DRAWING NO. 7-ABB-39 PLATE	
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE JAN 2 1969	
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR	DATE	CHECKED BY T.M. O'HARA DATE JAN 3 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-HR2


OVERALL LENGTH = 35'-8"
CORE END
COLUMN END
TRUSS NO. C32T23L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
TRUSS NO. C32T24R 35'-8" LONG
24T11A
24T11C
L = 35'-8"
PANEL NO. H7 SIZE 20'-0" x 35'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
Ea Side
SECTION C-C END SUPPORT ANGLE
DETAIL "B1"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
DETAIL "A"
SECTION D-D
SECTION E-E
DETAIL "D"
DETAIL "E"
DETAIL "G"
COVER PLATES 22 GA. THICK
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
TO BE MADE WITH LOW HYDROGEN RODS IN THE EQUAL. ALL CONNECTION ARC WELDS SHALL BE

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	[illegible]
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST 23L
	T23R	2	C32T23R - 35'-8"	ST 23R
	T24R	1	C32T24R - 35'-8"	ST 224R
BRIDGING TRUSSES	T11C	1	24T11C - 19'-11"	ST211C
	T11A	1	24T11A - 19'-11"	ST211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST403
	A5	2	3"x2"x1/4"x 8'-[illegible]	ST403
	A6	1	3"x2"x1/4"x 6'-2"	ST403
	A33	3	3"x2"x1/4"x 3'-0"	ST410
PATCH PLATES	PP3	12	2"x1/4"x 0'-7"	ST 400
	PP2	12	3"x3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x 0.033"x 17'-10 1/2"	ST303
	H1	3	7"x 0.135"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2"x 1 1/2"x 1/4"x 3"	400
#8 SHEAR ANCHOR	8A1	3	#8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1 1/2" x 3/8" x 3'-6"	ST 402
CONNECTION BAR	CB1	~~2~~	1" ∅ x 1'-3"	ST 400
	CB	1	1"∅ x 1'-5	
CONNECTION PLATES	P1	2	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	2	4 1/2" x .30" x 0'-9"	ST 400
	P3	2	4 1/2" x .30" x 1'-0"	ST 401
CLOSURE PLATE	PF11	3	2"x 1/4" x 0'-2 3/8"	ST412

REF DRWG	
7-A34-3	[illegible]
7-A34-15 & 13	7-22-68
7-A34-13.2	10-4-68
SA-12A	10-11-68
7-A33-33	10-4-68
7-A31-22	10-4-68
7-A32-8	7-22-68

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED

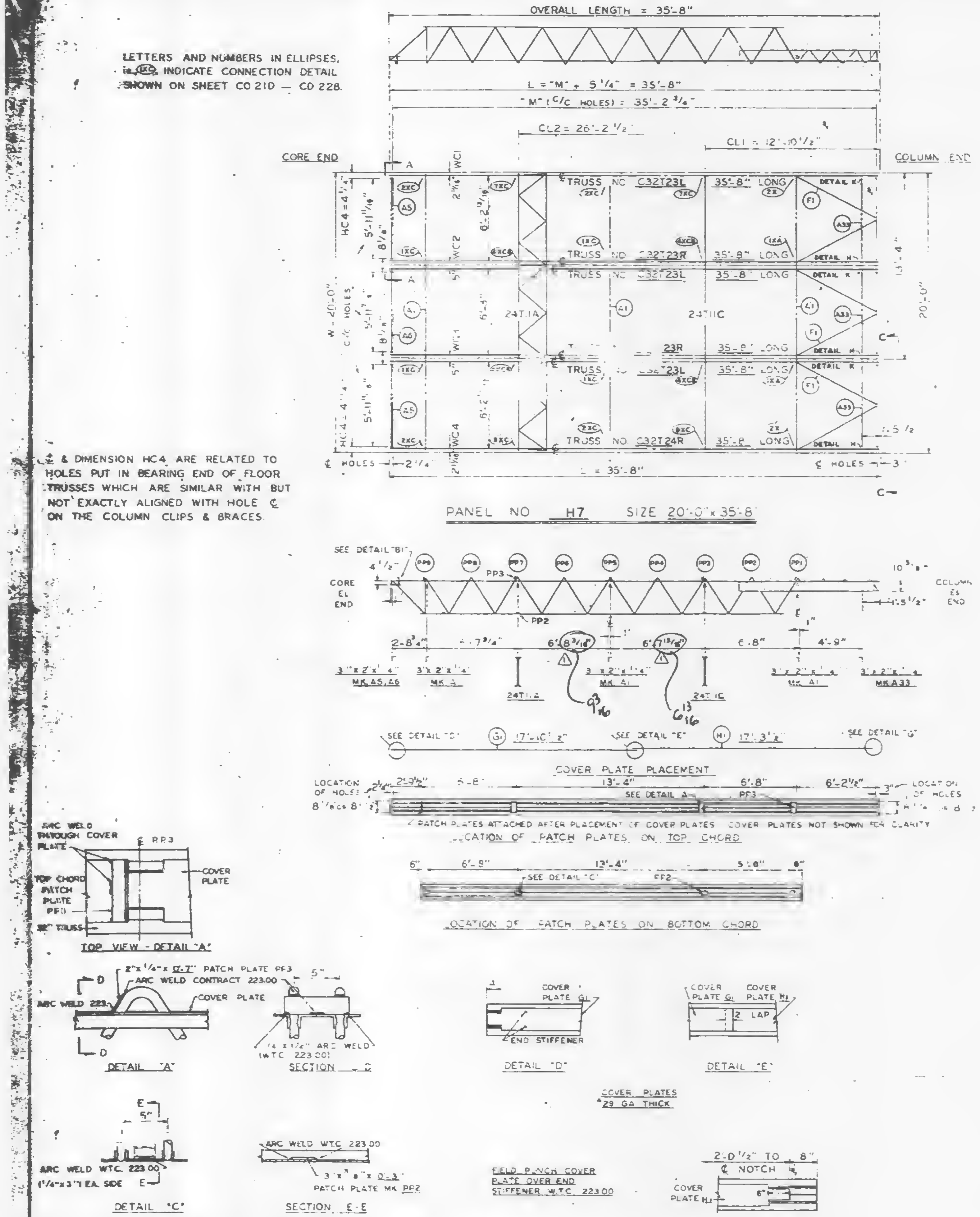
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92, (EAST & WEST)
PANEL H7 - 20'-0" x 35'-8"

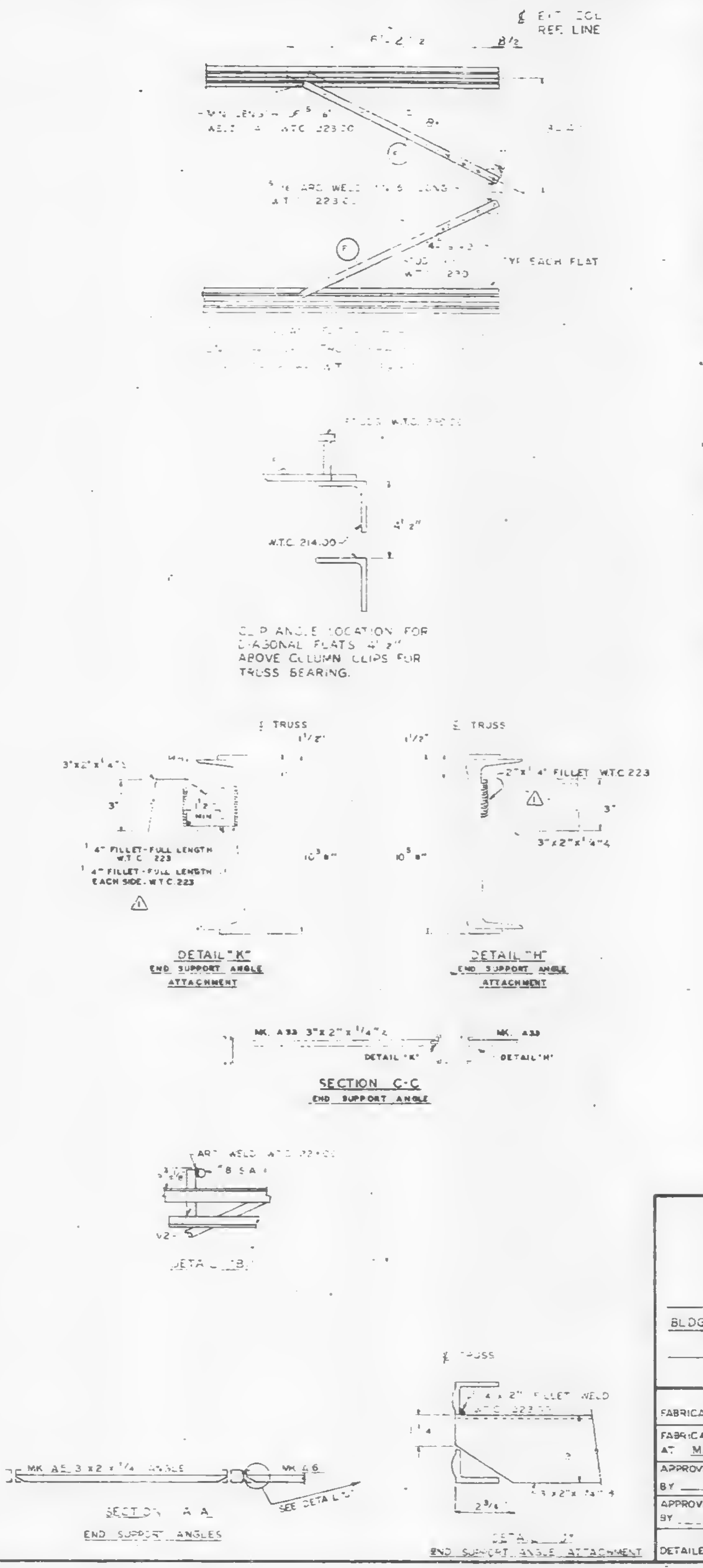
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A33-38	PLATE
APPROVED FOR FABRICATION AT ______ FOR PONYA	DATE	DRAWN BY [illegible] DATE JAN 2 1969	
APPROVED FOR FABRICATION BY ______ FOR FABRICA	DATE	CHECKED BY J.M. [illegible] DATE JAN 3 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT NO. W.T.C. 221	SHEET NO. FP-H7

LETTERS AND NUMBERS IN ELLIPSES, ie (2XC) INDICATE CONNECTION DETAIL SHOWN ON SHEET CO 210 – CD 228.


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO C32T23L 35'-8" LONG
TRUSS NO C32T23R 35'-8" LONG
TRUSS NO C32T23L 35'-8" LONG
TRUSS NO C32T24R 35'-8" LONG
DETAIL K
DETAIL H
24T11A
24T11C
W = 20'-0"
L = 35'-8"
PANEL NO H7 SIZE 20'-0" x 35'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES 29 GA THICK
DETAIL "C"
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL "G"
2'-0 1/2" TO 8" ℄ NOTCH
ARC WELD W.T.C. 223.00
3" x 3/8" x 0'-3" PATCH PLATE MK PP2
(1 1/4" x 3") EA. SIDE

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.


℄ EXT. COL REF. LINE
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
W.T.C. 214.00
℄ TRUSS
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "B"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	2	C32T23R - 35'-8"	ST223R
	T24R	1	C32T24R - 35'-8"	ST224R
BRIDGING TRUSSES	T11C	1	24 T11C - 19'-11"	ST211C
	T11A	1	24T11A - 19'-11"	ST211A
3"x 2"x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST403
	A5	2	3"x2"x1/4"x 6'-1 13/16"	ST403
	A6	1	3"x2"x1/4"x 6'-2"	ST403
	A33	3	3"x2"x1/4"x 5'-10 1/2"	ST410
PATCH PLATES	PP3	12	2"x 1/4" x 0'-7"	ST400
	PP2	12	3"x 3/8"x 0'-3"	ST400
COVER PLATES	G1	3	7"x 0.135"x 17'-10 1/2"	ST303
	H1	3	7"x 0.135"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST400
#8 SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST400
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST402
CONNECTION BAR	CB1	3	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P7	2	6 1/2" x .50" x 1'-0"	ST 401
CLOSURE PLATE	PFH	3	3"x 1/4" x 0'-2 3/8"	ST412

NO.	DATE	REVISION
⚠1	2-4-69	AS NOTED

REF DRWG

7-AB4-3	10-8-68
7-AB4-15 & 16	7-22-68
7-AB4-13.2	10-4-68
SA-124	10-11-68
7-AB3-38	10-4-68
7-AB1-22	10-4-68
7-AB2-6	7-22-68

SKILLING · HELLE
CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
☒ APPROVED AS NOTED
Date 2/28/69 By SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

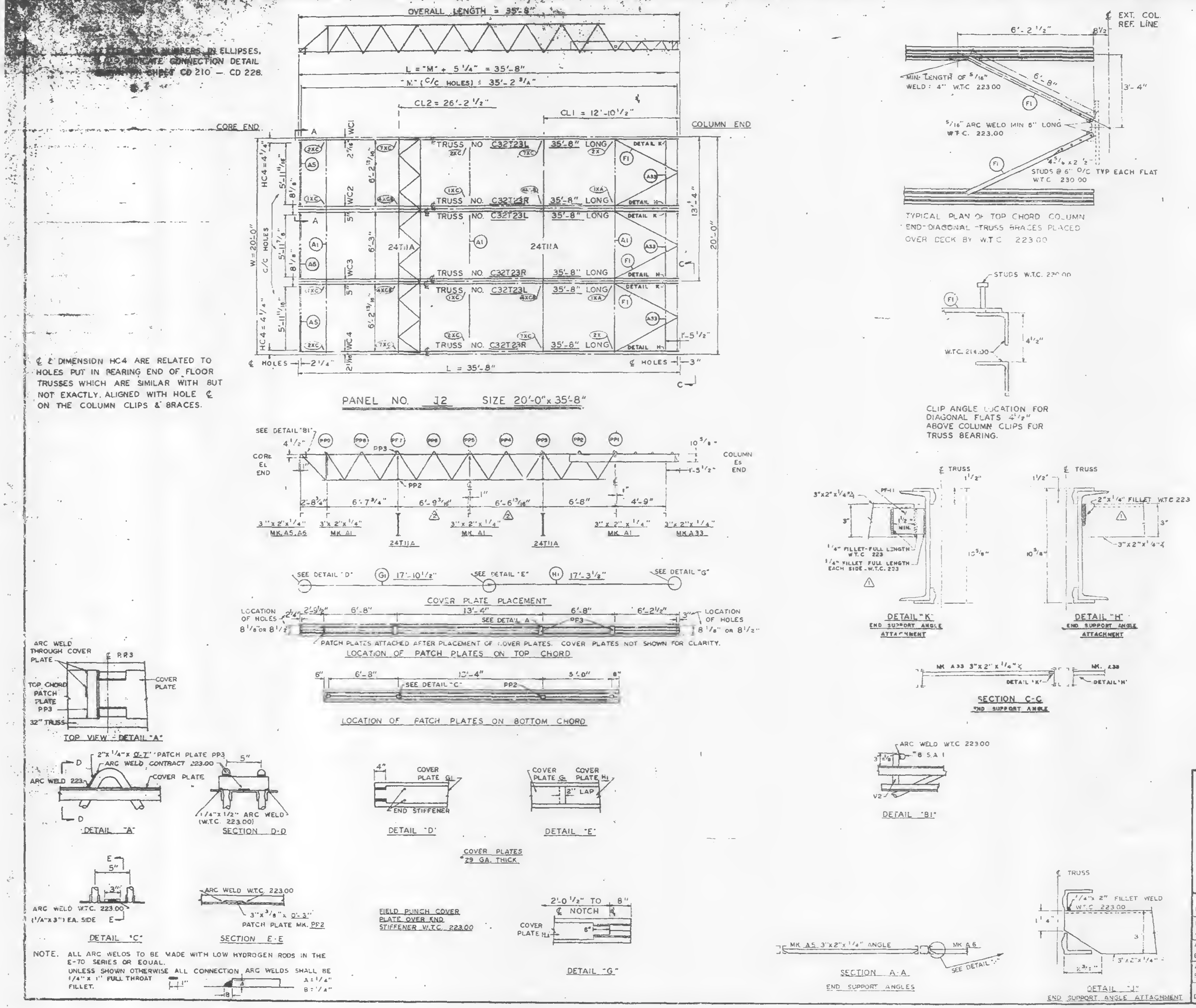
BLDG A FLOORS 25, 59, 92, (EAST & WEST)
PANEL H7 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-38 PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A. DATE	DRAWN BY R.B. DATE JAN 2, 1969
APPROVED FOR FABRICATION BY ____ FOR CONTRACTOR DATE	CHECKED BY J. M CHURA DATE JAN 3, 1969
DETAILED BY A. C. WEBER	FABRICATION CONT NO. W.T.C. 221	SHEET NO. FP-H7

LACLEDE STEEL CO.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T23L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
24T11A
DETAIL K
DETAIL H
W = 20'-0"
C/C HOLES
HC4 = 4 1/4"
L = 35'-8"
20'-0"
13'-4"
PANEL NO. J2 SIZE 20'-0" x 35'-8"
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES 29 GA. THICK
FIELD PUNCH COVER PLATE OVER KNO STIFFENER W.T.C. 223.00
DETAIL "C"
SECTION E-E
DETAIL "G"
6'-2 1/2"
6'-8"
3'-4"
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "B1"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT

LETTERS AND NUMBERS IN ELLIPSES, (2X) INDICATE CONNECTION DETAIL [illegible] SHEET CD 210 — CD 228.

℄ ℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST223L
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	BT211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x19'-11"	ST403
	A5	2	3"x2"x1/4"x6'-1 13/16"	ST403
	A6	1	3"x2"x1/4"x6'-2"	ST403
	A33	3	3"x2"x1/4"x5'-10 1/2"	ST410
PATCH PLATES	PP3	16	2"x1/4"x0'-7"	ST400
	PP2	16	3"x3/8"x0'-3"	ST400
COVER PLATES	G1	4	7"x0.35"x17'-10 1/2"	ST303
	H1	4	7"x0.135"x17'-3 1/2"	ST304
ANGLE CLIPS	C2	12	2 1/2"x1 1/2"x1/4"x6"	ST400
#8 SHEAR ANCHOR	SA1	4	#8 REBAR x 0'-7"	ST400
DIAGONAL FLATS	F1	6	1 1/2"x5/8"x6'-8"	ST402
CONNECTION BAR	CB1	6	1" ϕ x 1'-3"	ST400
CONNECTION PLATES	P1	4	3 1/2"x3/8"x0'-6 1/2"	ST400
	P2	4	4 1/2"x.39"x0'-9"	ST400
	P3	4	4 1/2"x.39"x1'-0"	ST400
CLOSURE PLATE	PF11	3	3"x1/4"x0'-2 3/8"	ST412

NO.	DATE	REVISION	BY
3	7-7-69	AS NOTED	G.D.C.
2	3-11-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

REF DRWG
- 7-AB4-3 10-15-68
- 7-AB4-15 & 16 7-22-68
- 7-AB4-15 2 10-4-68
- 3 SA-124 10-6-69
- 7-AB3-40 10-4-68
- 7-AB1-22 10-4-68
- 7-AB2-6 7-22-68

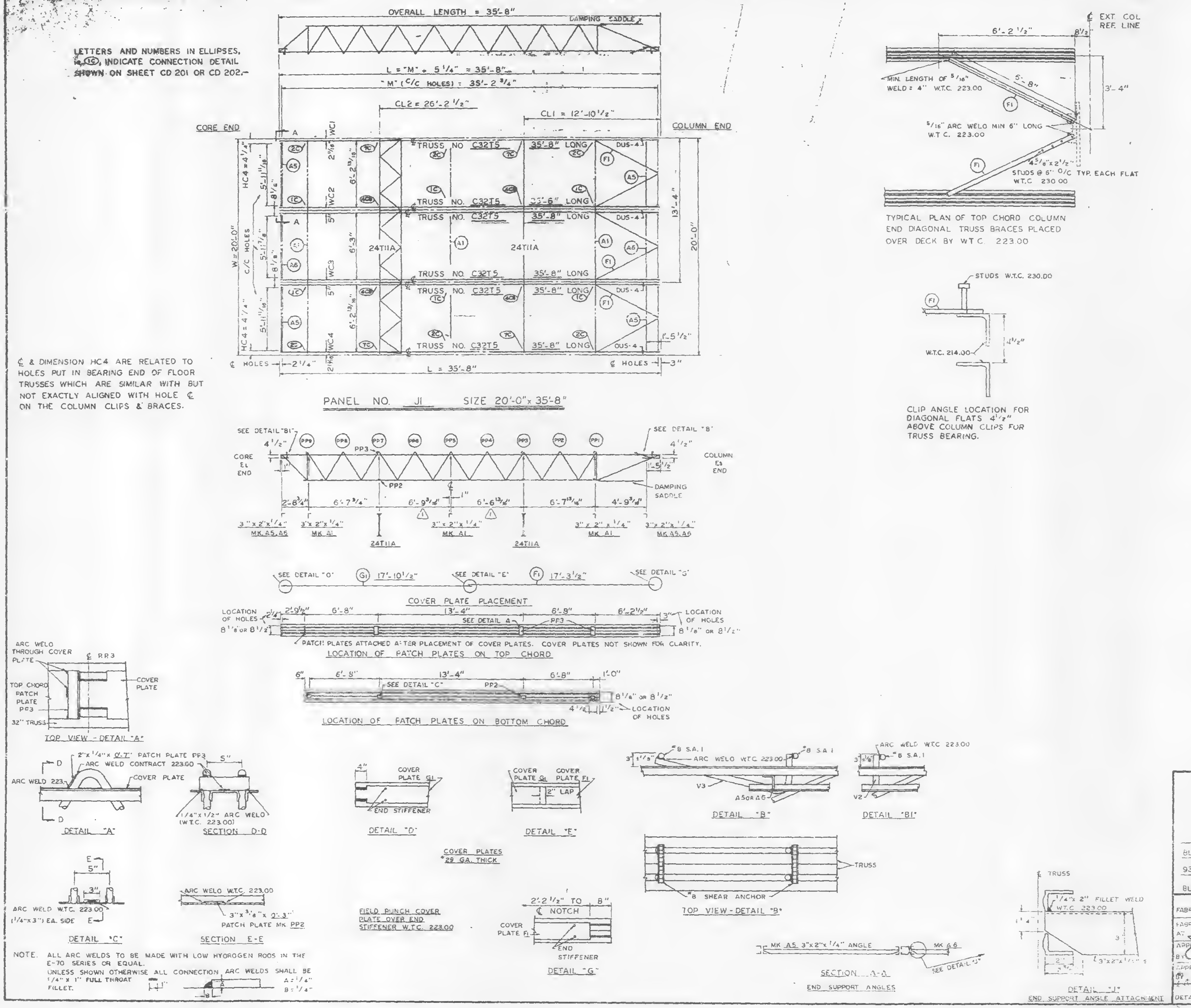
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92, (EAST & WEST)
PANEL J2 20'-0" x 35'-8"
BLDG. B FLOORS 25, 59 & 92 (NORTH & SOUTH) 2

FABRICATION BY LACLEDE STEEL COMPANY	
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO 7-AB3-41 PLATE
APPROVED FOR FABRICATION BY James White FOR P.N.Y.A. DATE 1/2/70	DRAWN BY [illegible] DATE JAN 6, 1969
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. FOR FABRICATOR DATE	CHECKED BY T.M. CHURA DATE JAN 7, 1969
DETAILED BY A.C. WEBER	FABRICATION CONT. NO. W.T.C. 221 — SHEET NO FP-J2

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.–

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET. A = 1/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	BT211A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST403
	A5	4	3" x 2" x 1/4" x 6'-1 13/16"	ST403
	A6	2	3" x 2" x 1/4" x 6'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP3	16	2" x 1/4" x 0'-7"	ST 400
	PP2	16	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	4	7" x 0135" x 17'-10 1/2"	ST303
	F1	4	7" x 0135 x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2 x 1 1/2 x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	12	# REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	4	3 1/2" x 3 1/2" x 5/8" x 3 6 7/8"	ST298
CONNECTION BAR	CB1	4	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	F1	6	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-23-69	AS NOTED	G.D.C.
1	2-21-69	AS NOTED	G.D.C.

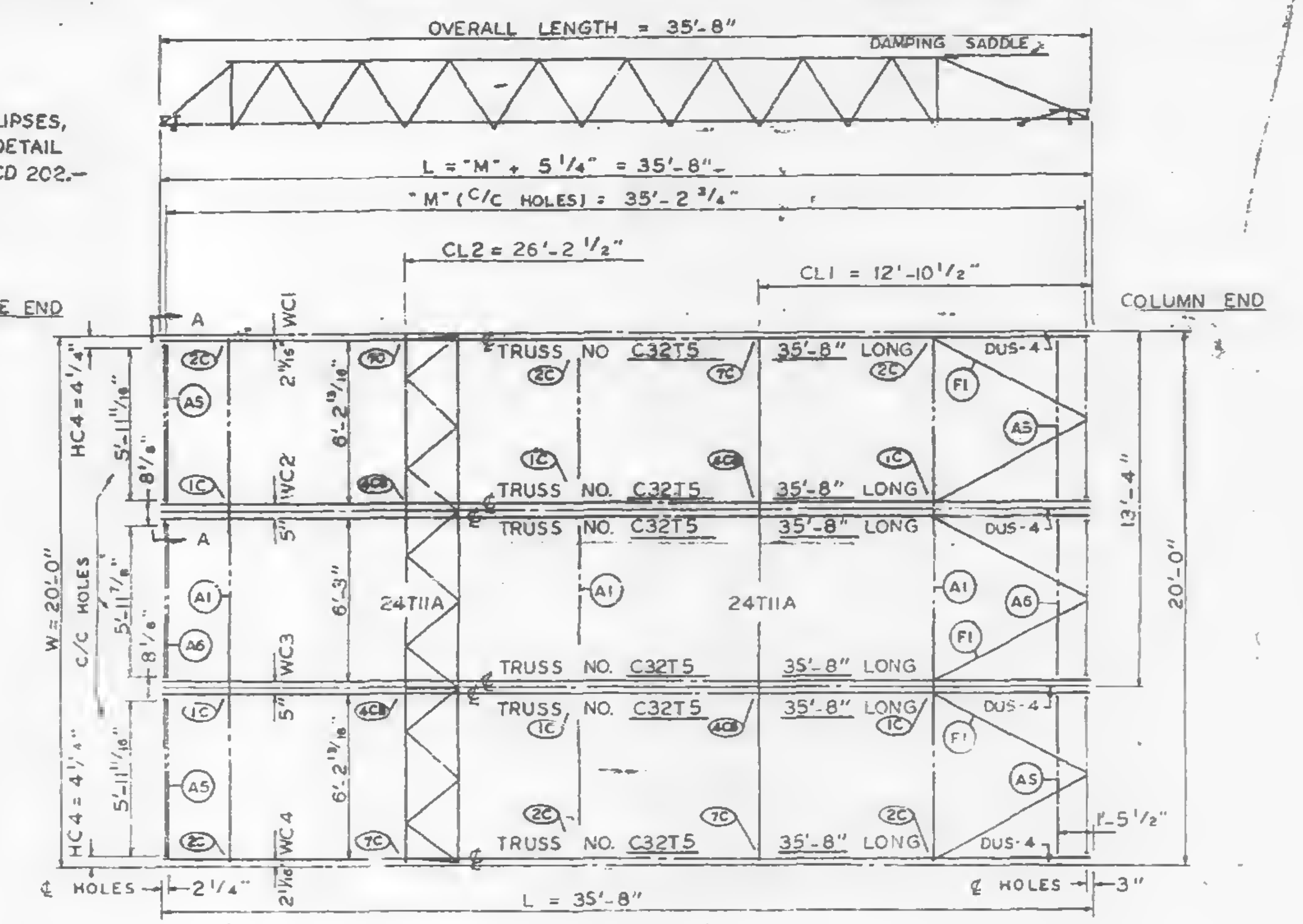
⚠2 REF. DRWG	
7-AB4-3.1	1-3-68
7-AB4-5 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-3-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-6	7-22-68
7-AB4-42 & 3	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-7 , 84-91 &
93-106 (EAST & WEST) PANEL J1 - 20' x 35'-8"
⚠1 BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91 93-106 (NORTH & SOUTH)

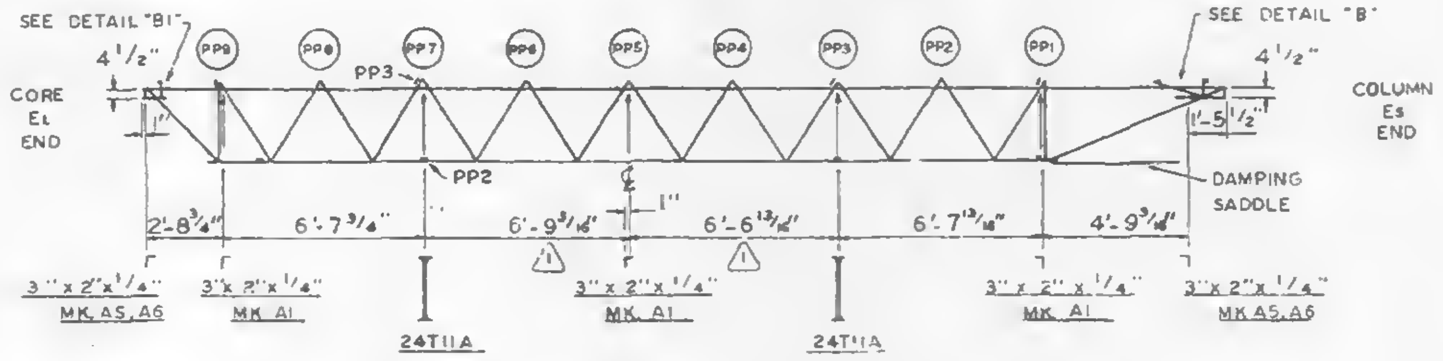
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. DATE 1/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY A.C. WEBER
DESIGN DRAWING NO. 7-AB3-15 PLATE
DRAWN BY [illegible] DATE APRIL 10, 1968
CHECKED BY T.M. CHURA DATE APRIL 10, 1966
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-J1

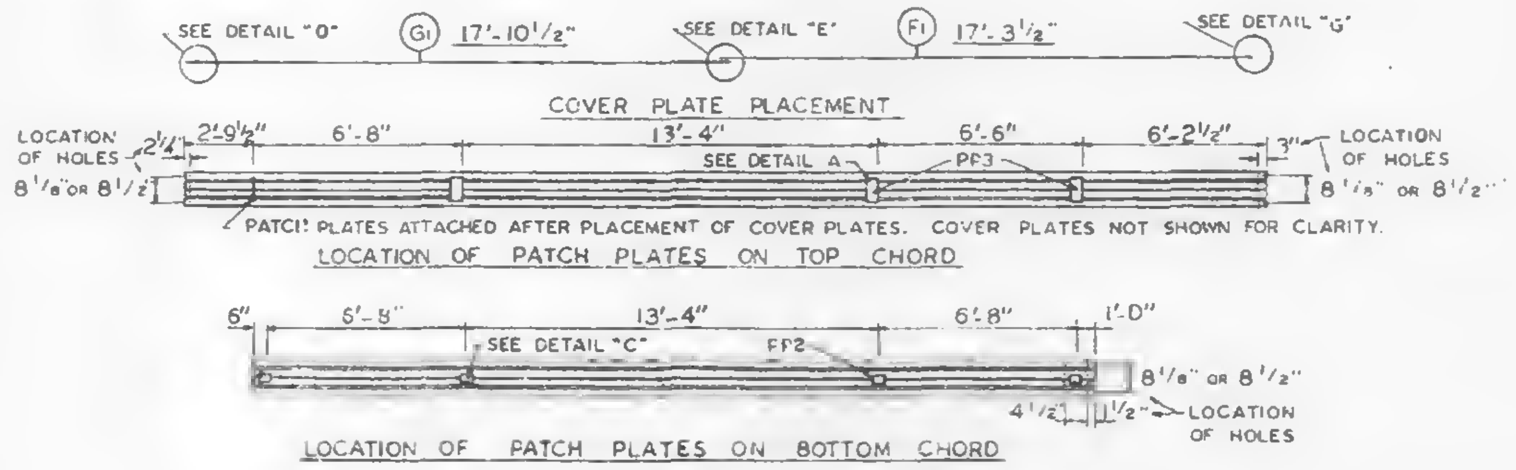
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



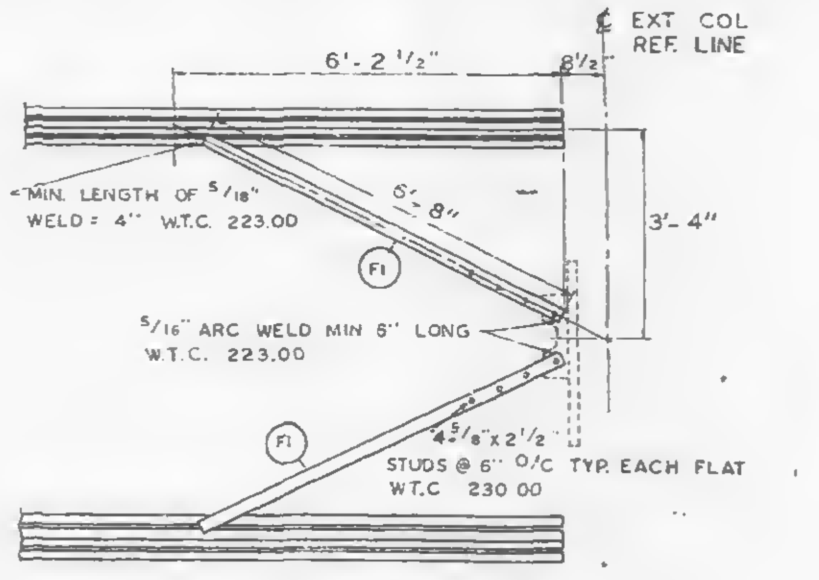
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. J1 SIZE 20'-0" x 35'-8"



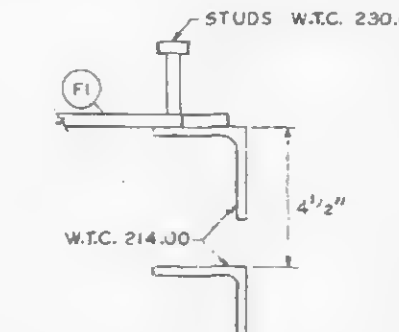


LOCATION OF PATCH PLATES ON BOTTOM CHORD



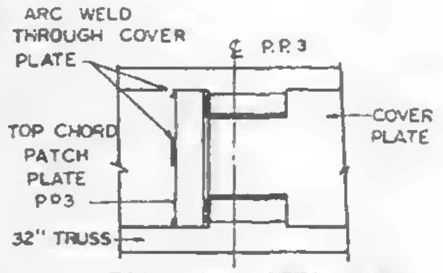
℄ EXT COL REF LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
6'-8"
3'-4"
F1
5/16" ARC WELD MIN 5" LONG W.T.C. 223.00
4 3/8" x 2 1/2"
STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

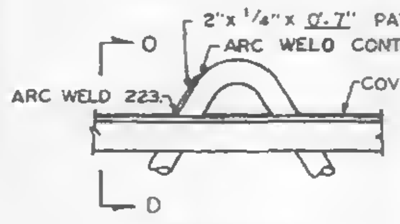


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

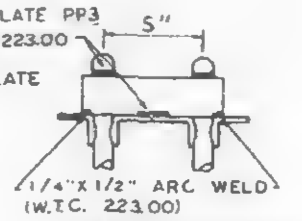
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST298
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST403
	A5	4	3" x 2" x 1/4" x 6'-1 13/16"	ST403
	A6	2	3" x 2" x 1/4" x 6'-2"	ST403
DIAGONAL FLATS	F1	6	4 1/2" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP3	16	2" x 1/4" x 0'-7"	ST 400
	PP2	16	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	4	7" x 0.135" x 17'-10 1/2"	ST 303
	F1	4	7" x .0135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2 x 1 1/2 x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	12	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	4	2 1/2" x 3 1/2" x 3/8" x 3' 6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ɸ x 1'-3"	ST 400
CONNECTION PLATES	P1	6	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400



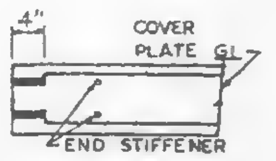
TOP VIEW - DETAIL "A"



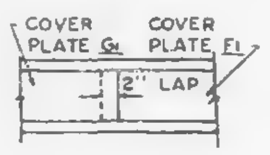
DETAIL "A"



SECTION D-D

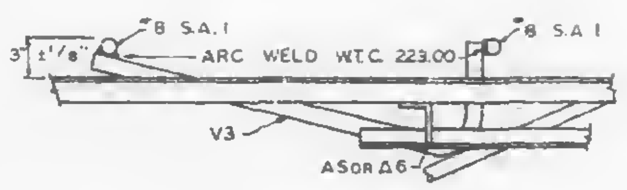


DETAIL "O"

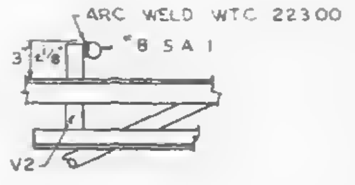


DETAIL "E"

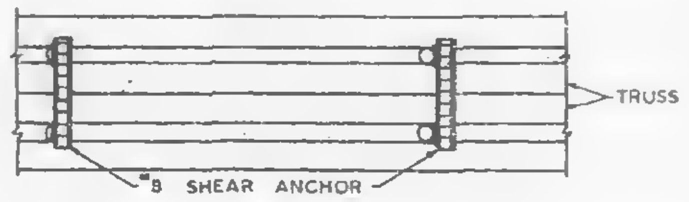
COVER PLATES #29 GA. THICK



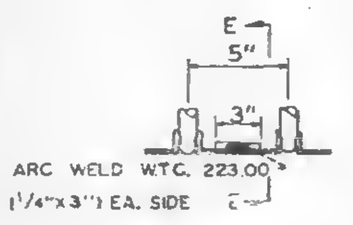
DETAIL "B"



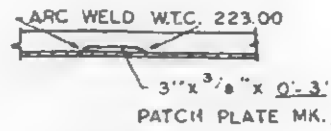
DETAIL "B1"



TOP VIEW - DETAIL "B"

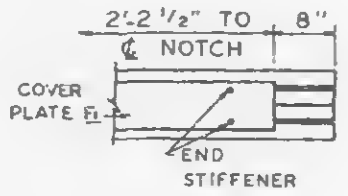


DETAIL "C"

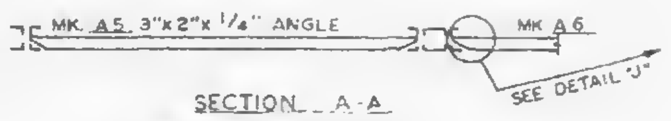


SECTION E-E

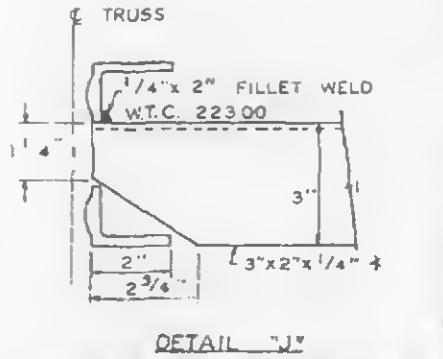
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



DETAIL "G"



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY
2	6-23-69	AS NOTED	G.D.C.
1	2-21-69	AS NOTED	G.D.C.

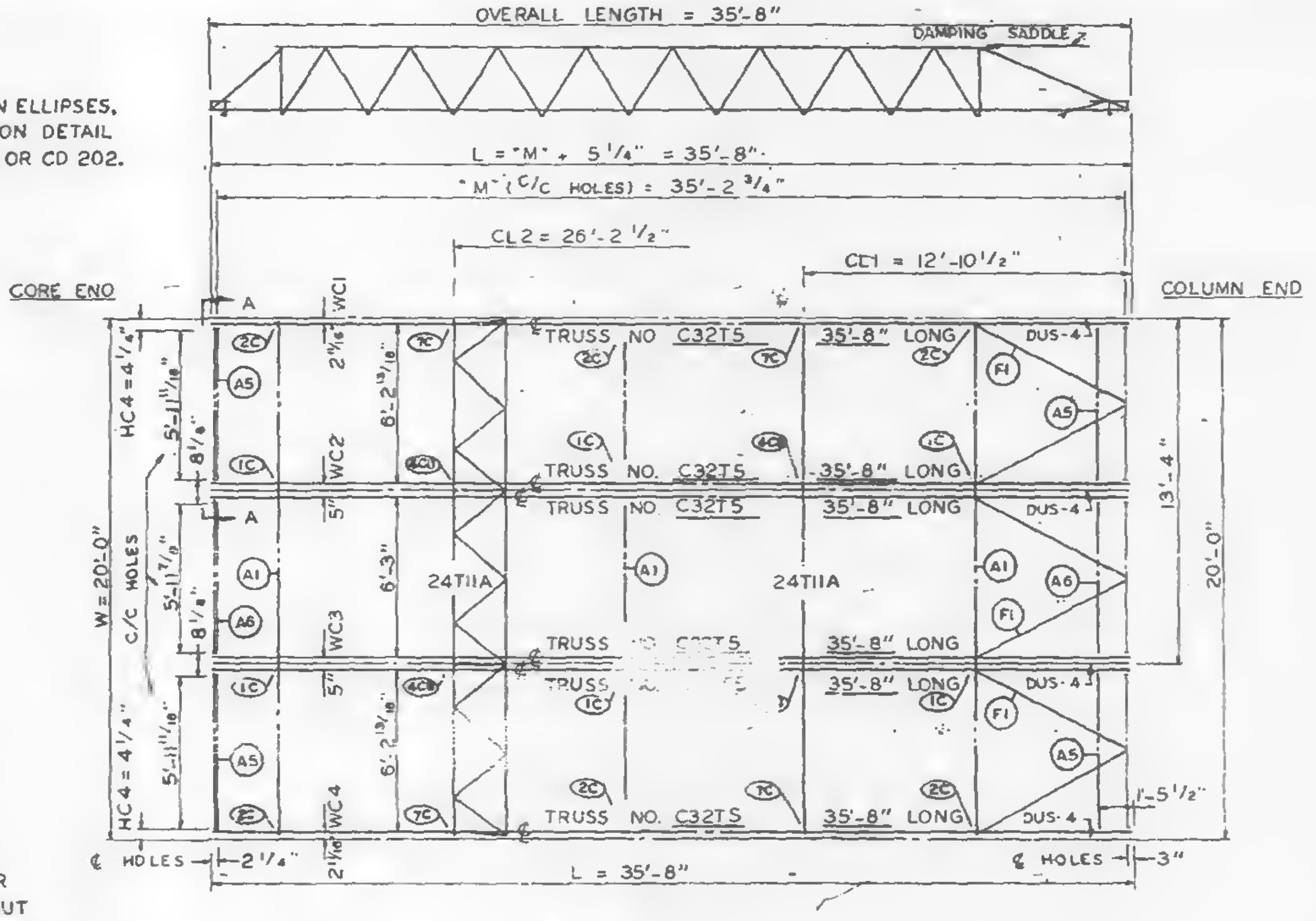
(2) REF. DRWG
7-AB4-3.1 1-3-68
7-AB4-15 & 16 7-22-68
7-AB4-39-41 7-22-68
SA-124 1-6-69
7-AB3-2 1-3-68
7-AB1-11 & 12 7-22-68
7-AB2-6 7-22-68
7-AB4-42 & 43 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-88, 88-74, [illegible] 91 &
93-108 (EAST & WEST) PANEL J1 - 20'-0" x 35'-8"
(1) BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-[illegible], 93-[illegible] & SOUTH)

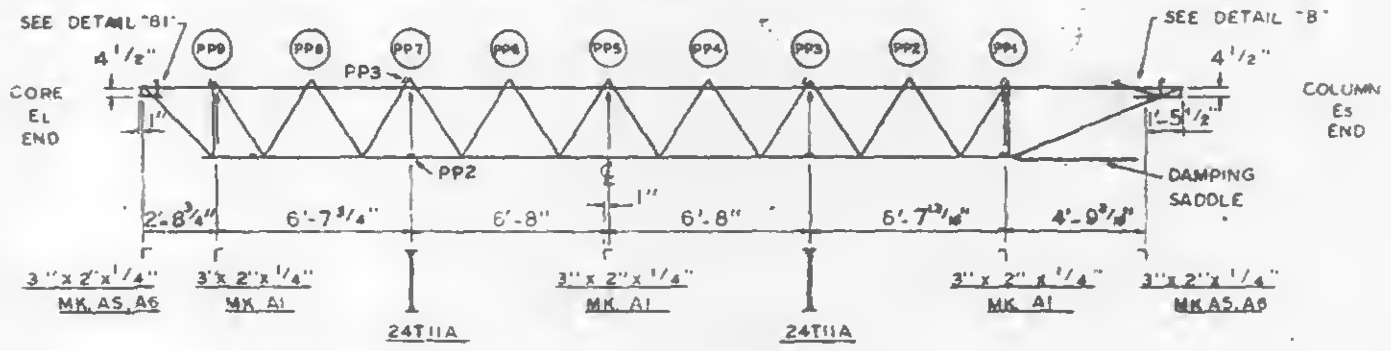
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-19 PLATE
APPROVED FOR FABRICATION BY ________ FOR P.O.N.Y.A. DATE 1/2/70
DRAWN BY G.B. DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 10, 1968
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221

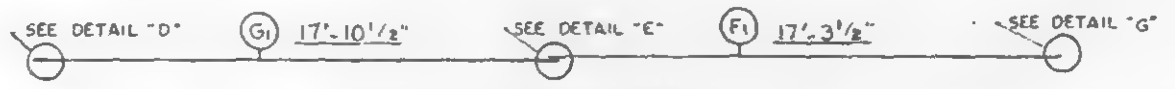
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.


OVERALL LENGTH = 35'-8"
DAMPING SADDLE
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
24T11A
24T11A
DUS-4
WC1
WC2
WC3
WC4
HC4 = 4 1/4"
W = 20'-0"
C/C HOLES
13'-4"
20'-0"
1'-5 1/2"
¢ HOLES
2 1/4"
L = 35'-8"
3"
A1
A5
A6
F1
1C
2C
7C

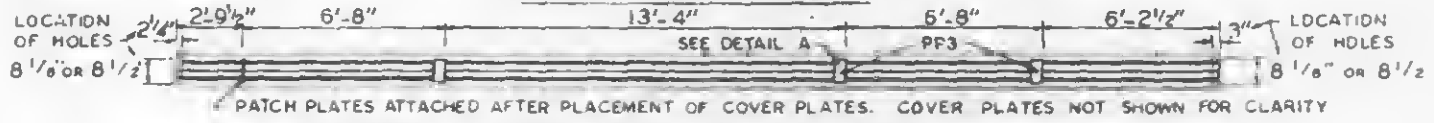
PANEL NO. J1 SIZE 20'-0" x 35'-8"

¢ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES.



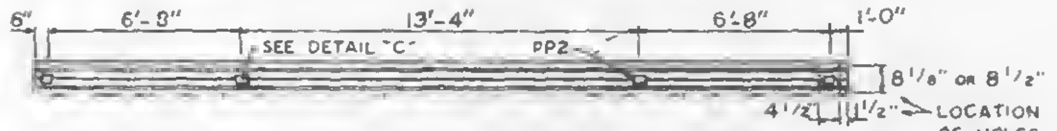


COVER PLATE PLACEMENT

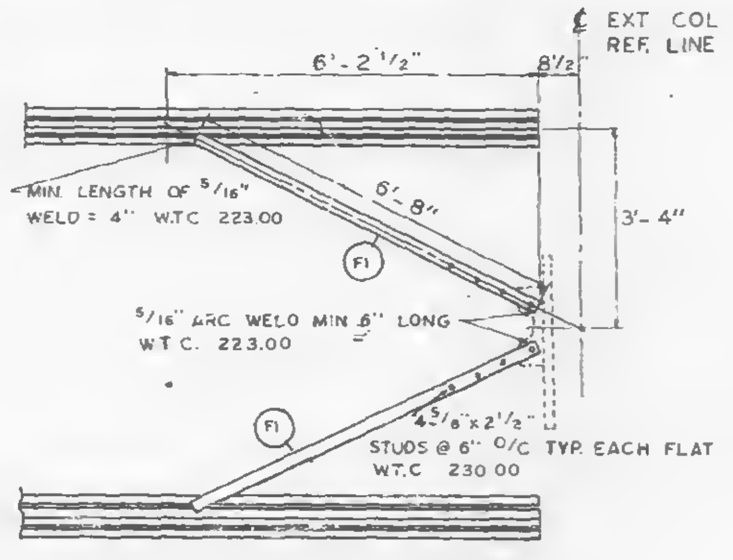


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

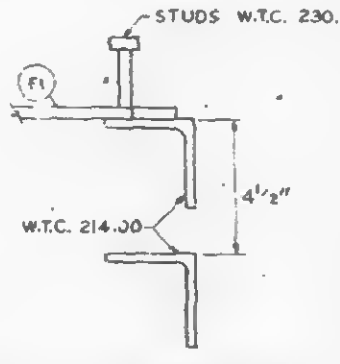
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

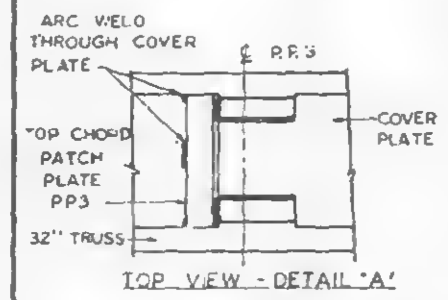

¢ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
6'-8"
3'-4"
F1
5/16" ARC WELD MIN. 6" LONG W.T.C. 223.00
4 3/8"x2 1/2"
STUDS @ 6" C/C TYP. EACH FLAT W.T.C. 230.00
F1

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK PY W.T.C. 223.00

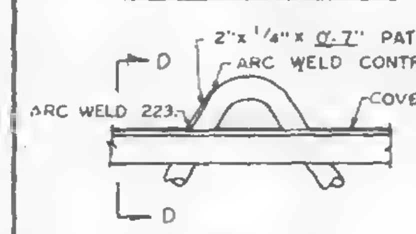


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

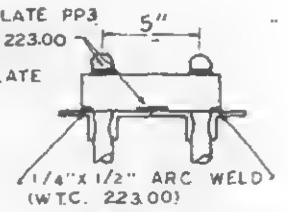
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TS	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x19'-11"	ST403
	A5	4	3"x2"x1/4"x6'-1 13/16"	ST403
	A6	2	3"x2"x1/4"x6'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2"x5/8"x6'-8"	ST402
PATCH PLATES	PP3	16	2"x1/4"x0'-7"	ST400
	PP2	16	3"x3/8"x0'-3"	ST400
COVER PLATES	G1	4	7"x.0135"x17'-10 1/2"	ST303
	F1	4	7"x.0135"x17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2"x1 1/2"x1/4"x6"	ST400
#8 SHEAR ANCHOR	SA1	12	#8 REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS-4	4	3 1/2"x3 1/2"x3/8"x0'-0 7/8"	ST298
CONNECTION BAR	CB1	4	1" Φ x 1'-3"	ST400
CONNECTION PLATES	P1	6	3 1/2"x3/8"x0'-5 1/2"	ST400
	P2	4	4 1/2"x.39"x0'-9"	ST400
	P3	4	4 1/2"x.39"x1'-0"	ST400



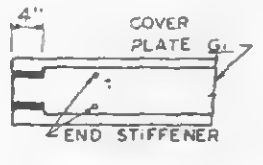
TOP VIEW - DETAIL "A"



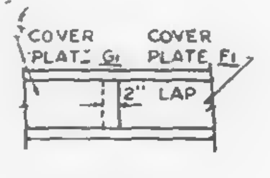
DETAIL "A"



SECTION D-D

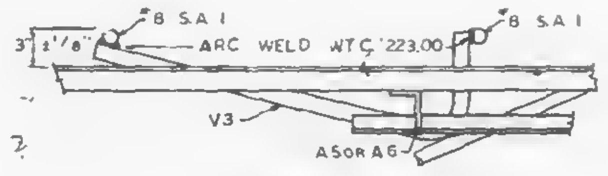


DETAIL "D"

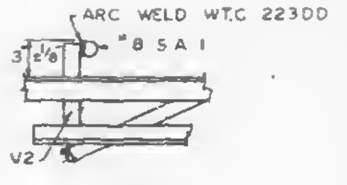


DETAIL "E"

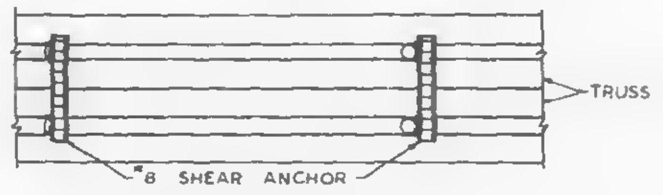
COVER PLATES #29 GA. THICK



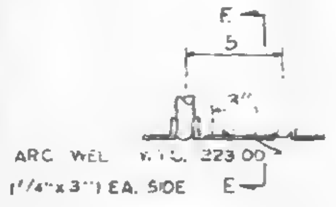
DETAIL "8"



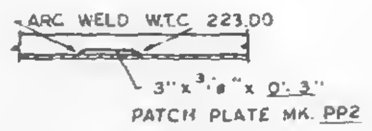
DETAIL "81"



TOP VIEW - DETAIL "8"

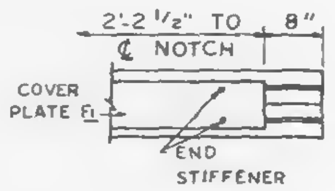


DETAIL "C"

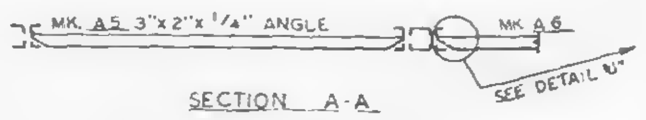


SECTION E-E

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

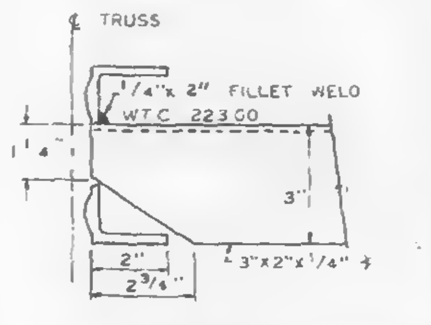


DETAIL "G"



SECTION A-A

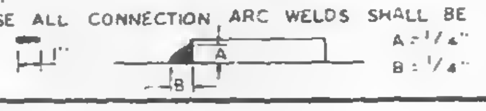
END SUPPORT ANGLES



DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET



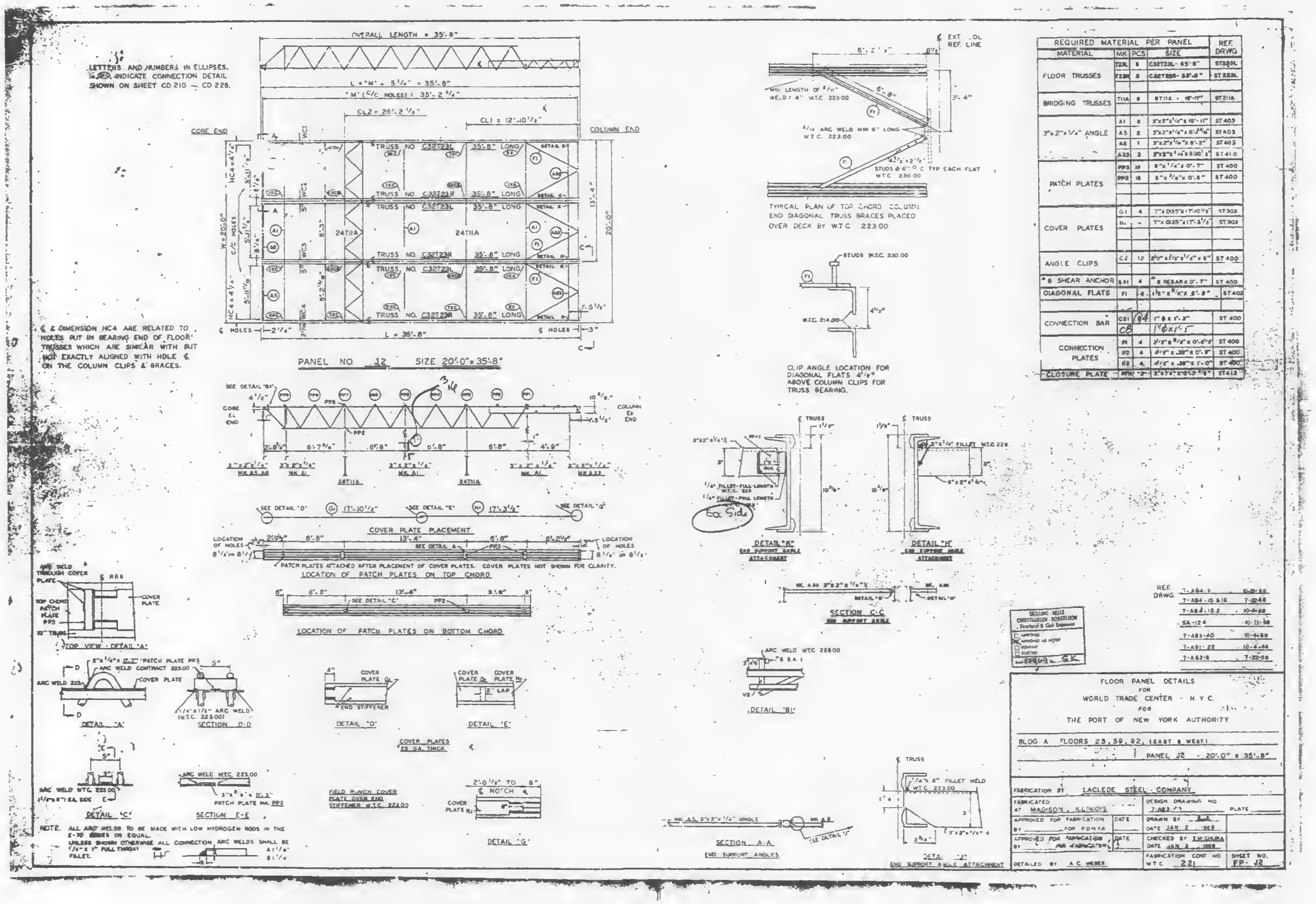
REF. DRWG.	
7-AB4 3 & 4	3 69
7-AB4 5 & 16	5-6-68
7-AB4 39-41	3-68
SA 24	10-20-67
7-AB3 2	1-3-68
7-AB1 11 & 12	5-10-68
7-AB2 6	2-15-68
7-AB4 42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 &
93-106 (EAST & WEST) PANEL J1 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-19 5-10-68 PLATE	
APPROVED FOR FABRICATION BY ______ FOR PONYA	DATE 8/16/68	DRAWN BY Ruh DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 10, 1968	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-J1


OVERALL LENGTH = 35'-8"
CORE END
COLUMN END
TRUSS NO. C32T23L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
24T11A
L = 35'-8"
℄ HOLES
PANEL NO. J2 SIZE 20'-0" x 35'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL 'A'
DETAIL 'A'
SECTION D-D
DETAIL 'C'
SECTION E-E
DETAIL 'D'
DETAIL 'E'
COVER PLATES 22 GA. THICK
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL 'G'
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL 'B1'
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
EXT. COL. REF. LINE

LETTERS AND NUMBERS IN ELLIPSES. I.E. (SEE) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-5" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/8"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	6	C32T23L - 35'-8"	ST223L
	T23R	2	C32T23R - 35'-8"	ST 223L
BRIDGING TRUSSES	T11A	8	8T11A - 19'-11"	ST211A
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4"x 19'-11"	ST 403
	A5	2	3"x2"x1/4"x 6'-1 15/16"	ST 403
	A8	1	3"x2"x1/4"x 8'-2"	ST 403
	A33	3	3"x2"x1/4"x 0'-20 1/2"	ST 410
PATCH PLATES	PP3	30	8"x1/4"x 0'-7"	ST 400
	PP2	18	8"x3/8"x 0'-8"	ST 400
COVER PLATES	G1	4	7"x 0.135"x 17'-10 1/2"	ST 303
	H1	-	7"x 0.135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2"x 1 1/2"x 1/4"x 8"	ST 400
#8 SHEAR ANCHOR	SA1	4	#8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 8'-8"	ST 402
CONNECTION BAR	CB1	4	1"φ x 1'-3"	ST 400
	CB		1"φ x 1'-1"	
CONNECTION PLATES	P1	4	3 1/2"x 5/8"x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-3"	ST 400
	P2	4	4 1/2" x .38" x 1'-0"	ST 400
CLOSURE PLATE	PP4	3	3"x1/4"x 0'-2 7/8"	ST412

REF. DRWG	
7-A84-3	10-5-68
7-A84-15 & 16	7-22-68
7-A84-15.2	10-4-68
SA-124	10-11-68
7-A83-40	10-4-68
7-A81-22	10-4-68
7-A82-8	7-22-68

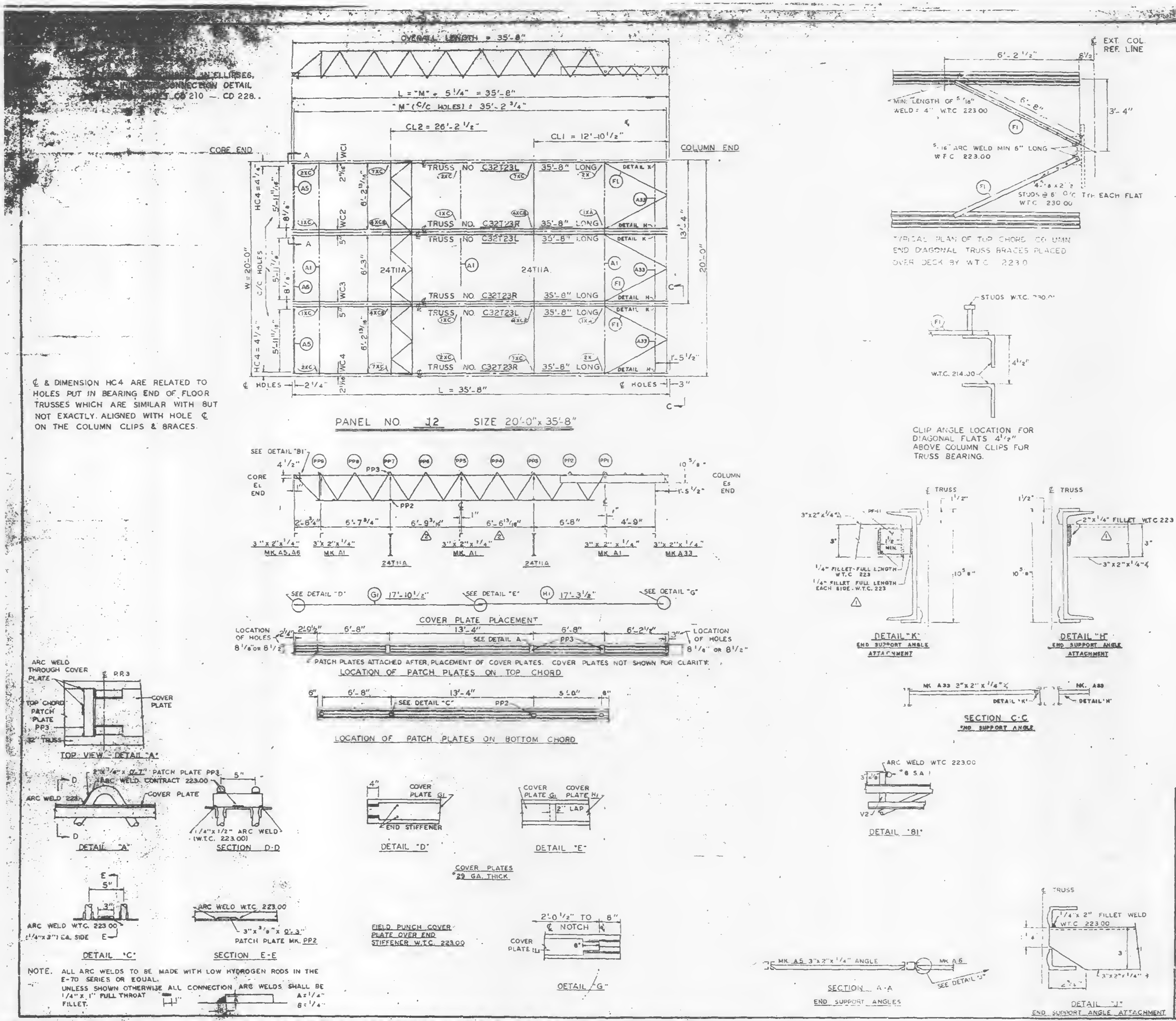
SKILLING HELLE CHRISTIANSEN ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
1/21/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92, (EAST & WEST)
PANEL J2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-43 PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE
DRAWN BY DATE JAN 2, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE JAN 3, 1969
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-J2

[illegible] IN ELLIPSES, [illegible] CONNECTION DETAIL [illegible] CD 210 — CD 228.



PANEL NO. 12 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

COVER PLATE PLACEMENT

* PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP VIEW - DETAIL "A"

DETAIL "A"

SECTION D-D

DETAIL "D"

DETAIL "E"

COVER PLATES #29 GA. THICK

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

DETAIL "G"

DETAIL "C"

SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.0

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL "K"
END SUPPORT ANGLE ATTACHMENT

DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE

DETAIL "B1"

SECTION A-A
END SUPPORT ANGLES

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	[illegible]
	T23R	3	C32T23R - 35'-8"	[illegible]
BRIDGING TRUSSES	T11A	2	2THA - 19'-11"	[illegible]
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST 403
	A5	2	3" x 2" x 1/4" x 6'-1 13/16"	ST 403
	A6	1	3" x 2" x 1/4" x 6'-2"	ST 403
	A33	3	3" x 2" x 1/4" x 5'-10 1/2"	ST 410
PATCH PLATES	PP3	16	2" x 1/4" x 0'-7"	ST 400
	PP2	16	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	4	7" x .0135" x 17'-10 1/2"	ST 303
	H1	4	7" x .0135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	4	#8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
CONNECTION BAR	CB1	6	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
CLOSURE PLATE	PF11	3	3" x 1/4" x 0'-2 3/8"	ST 412

NO.	DATE	REVISION	BY
3	7-7-69	AS NOTED	G.D.C.
2	3-11-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

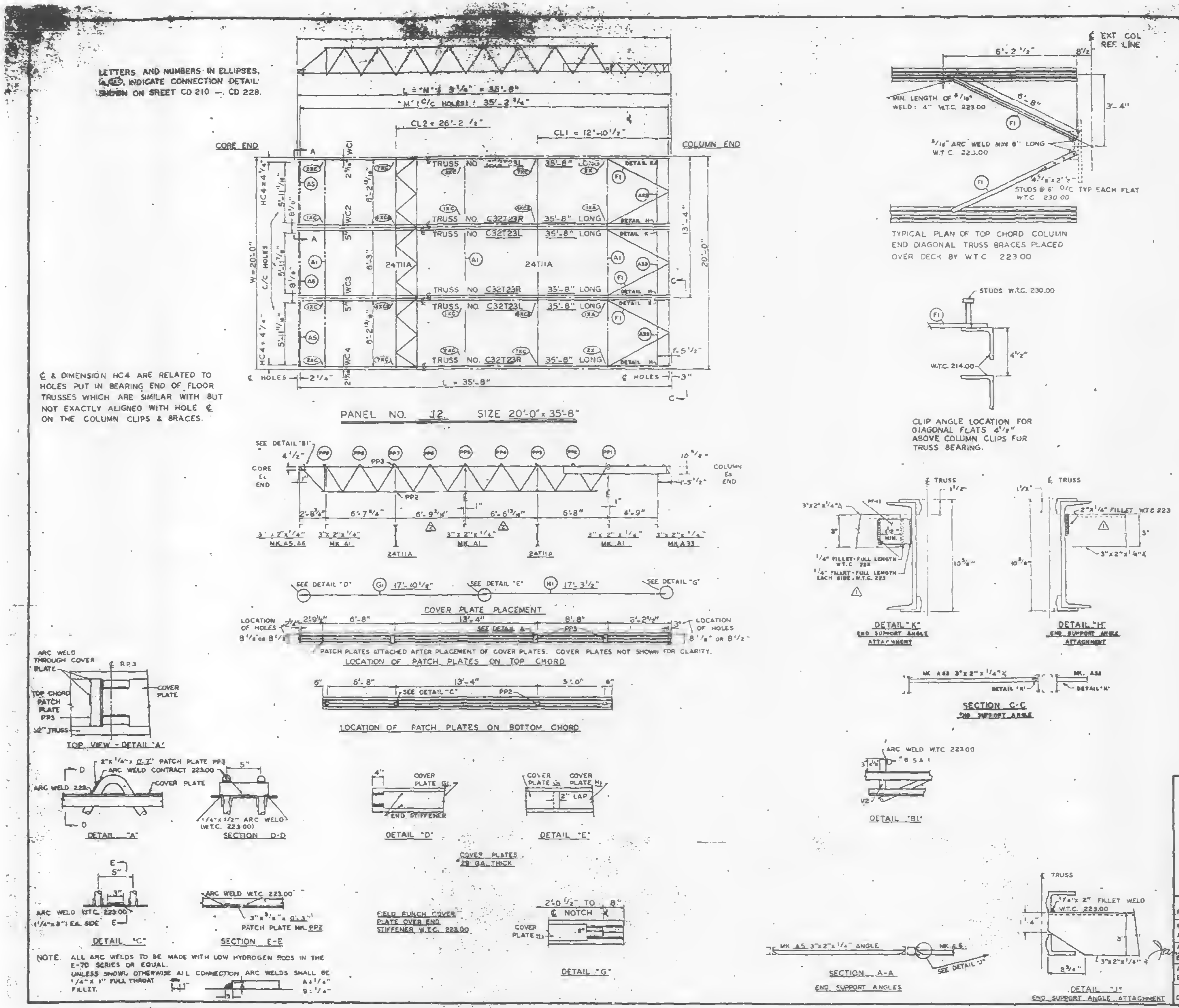
REF. DRWG.	
7-A84-4	10-15-68
7-A84-15 & 16	7-22-68
7-A84-15.2	10-4-68
SA-184	10-6-69
7-A83-4	10-4-68
7-A81-22	10-4-68
7-A32-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92, (EAST & WEST)
PANEL 12 x 35'-8"
BLDG. B FLOORS 25, 59 & 92 (NORTH & SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-4
PLATE
APPROVED FOR FABRICATION BY James L. for P.N.Y.A. DATE 1/2/70
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. FOR FABRICATOR DATE
DRAWN BY [illegible] DATE JAN 2 1969
CHECKED BY T.J. CHURA DATE JAN [illegible] 1969
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP 12

LETTERS AND NUMBERS IN ELLIPSES, i.e. (2XC), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.


L = "N" + 9 1/8" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T23L 35'-8" LONG
TRUSS NO. C32T23R 35'-8" LONG
24T11A
W = 20'-0"
C/C HOLES
HC4 = 4 1/4"
L = 35'-8"
℄ HOLES
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. J2 SIZE 20'-0" x 35'-8"
SEE DETAIL "B1"
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
17'-10 1/8"
17'-3 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES 22 GA. THICK
DETAIL "C"
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL "G"
EXT COL REF LINE
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
STUDS @ 6" O/C TYP EACH FLAT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "B1"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST223L
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x19'-11"	ST403
	A5	2	3"x2"x1/4"x6'-4 13/16"	ST403
	A6	1	3"x2"x1/4"x6'-2"	ST403
	A33	3	3"x2"x1/4"x3'-10 1/2"	ST410
PATCH PLATES	PP3	18	2"x1/4"x0'-7"	ST400
	PP2	18	3"x3/8"x0'-3"	ST400
COVER PLATES	G1	4	7"x0135"x17'-10 1/2"	ST303
	H1	4	7"x0135"x17'-3 1/2"	ST303
ANGLE CLIPS	12	12	2 1/2"x1 1/2"x1/4"x6"	ST400
#8 SHEAR ANCHOR	SA1	4	#8 REBAR x 0'-7"	ST400
DIAGONAL FLATS	F1	3	1 1/2"x5/8"x6'-8"	ST402
CONNECTION BAR	CB1	6	1" ⌀ x 1'-3"	ST400
CONNECTION PLATES	P1	4	3 1/2"x3/8"x0'-6 1/2"	ST400
	P2	4	4 1/2"x.30"x0'-9"	ST400
	P3	4	4 1/2"x.30"x1'-0"	ST400
CLOSURE PLATE	PF11	3	3"x1/4"x0'-2 3/8"	ST412

NO.	DATE	REVISION	BY
2	3-11-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

REF. DRWG		
	7-A84-3	10-5-68
	7-A84-15 & 16	7-22-68
	7-A84-15.2	10-4-68
	SA-124	10-11-68
	7-A83-40	10-4-68
	7-A81-22	10-4-68
	7-A82-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

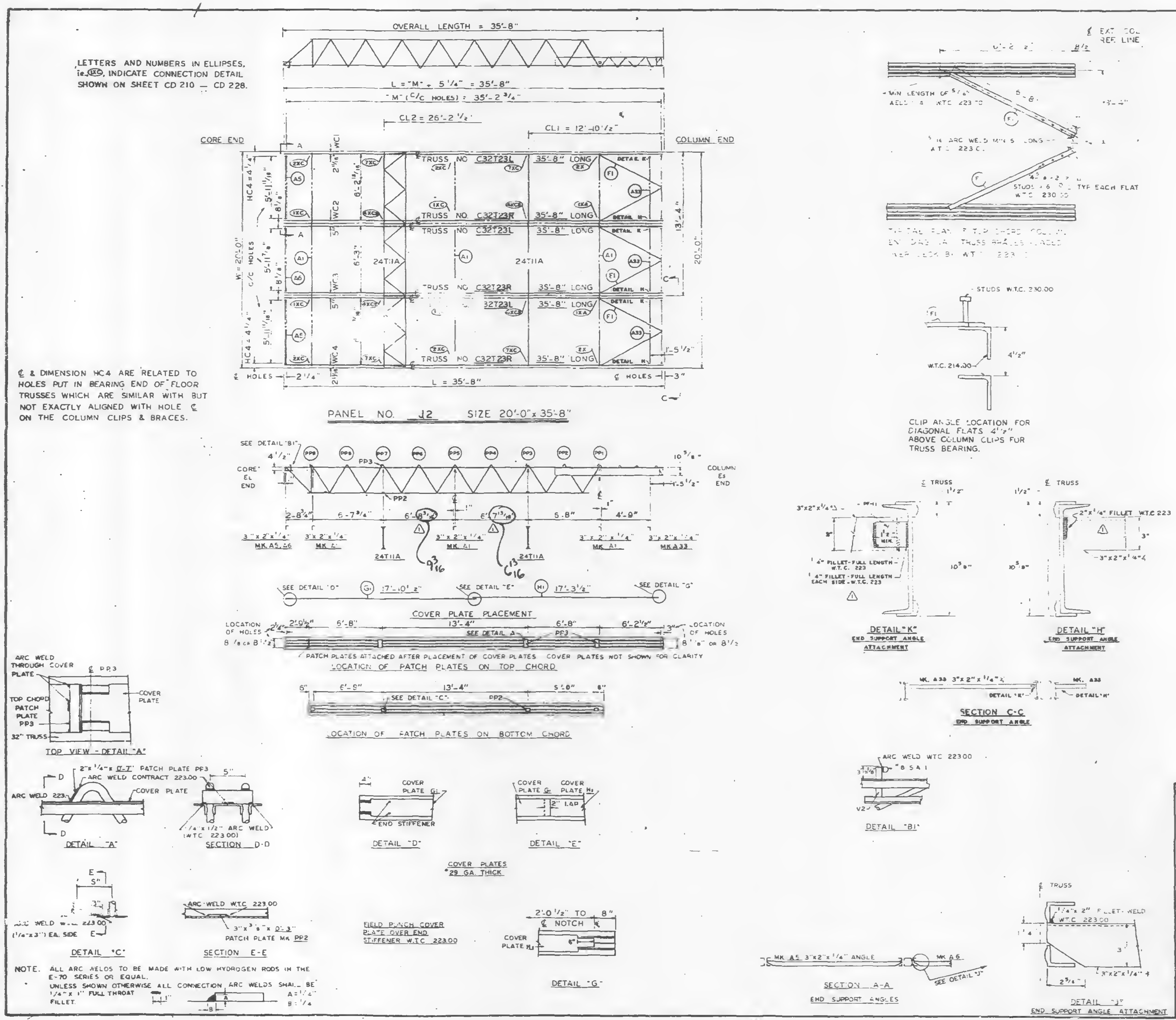
BLDG. A FLOORS 25, 59, 92, (EAST & WEST)

PANEL J2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-40	PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. DATE 3/24/69	DRAWN BY G.G. DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE	CHECKED BY T.M. CHURA DATE JAN 3, 1969	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-J2

LETTERS AND NUMBERS IN ELLIPSES, ie.(1XC) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO C32T23L 35'-8" LONG
TRUSS NO C32T23R 35'-8" LONG
24T11A
W = 20'-0"
C/C HOLES
DETAIL K
DETAIL H
L = 35'-8"
PANEL NO. J2 SIZE 20'-0" x 35'-8"
SEE DETAIL "B1"
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
17'-10 1/2"
17'-3 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES 29 GA THICK
DETAIL "C"
SECTION E-E
ARC WELD W.T.C. 223.00
3" x 3/8" x 0'-3" PATCH PLATE MK PP2
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL "G"
MIN LENGTH OF 5/16" WELD 4" W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
2" x 1/4" FILLET W.T.C. 223
SECTION C-C END SUPPORT ANGLE
DETAIL "B1"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET. A = 1/4" B = 1/4

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST223L
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3" x 2" x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST403
	A5	2	3"x2"x1/4"x 6'-1 13/16"	ST403
	A6	1	3"x2"x1/4"x 6'-2"	ST403
	A33	3	3"x2"x1/4"x 5'-10 1/2"	ST410
PATCH PLATES	PP3	16	2" x 1/8" x 0'-7"	ST400
	PP2	16	3" x 3/8" x 0'-3"	ST400
COVER PLATES	G1	4	7" x 0135" x 17'-10 1/2"	ST303
	H1	4	7" x 0135" x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST400
#8 SHEAR ANCHOR	SA1	4	#8 REBAR x 0'-7"	ST400
DIAGONAL FLATS	F1	8	1 1/2" x 5/8" x 6'-8"	ST402
CONNECTION BAR	CB1	6	1" ● x 1'-3"	ST400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST400
	P2	4	4 1/2" x .39" x 0'-9"	ST400
	P3	4	4 1/2" x .39" x 1'-0"	ST400
CLOSURE PLATE	PFH	3	3" x 1/4" x 0'-2 3/8"	ST412

NO	DATE	REVISION	BY
⚠1	2-4-69	AS NOTED	G.D.C.

REF DRWG

7-AB4-3	10-5-68
7-AB4-15 & 16	7-22-68
7-AB4-15.2	10-4-68
SA-124	10-11-68
7-AB3-4D	10-4-68
7-AB1-22	10-4-68
7-AB2-6	7-22-68

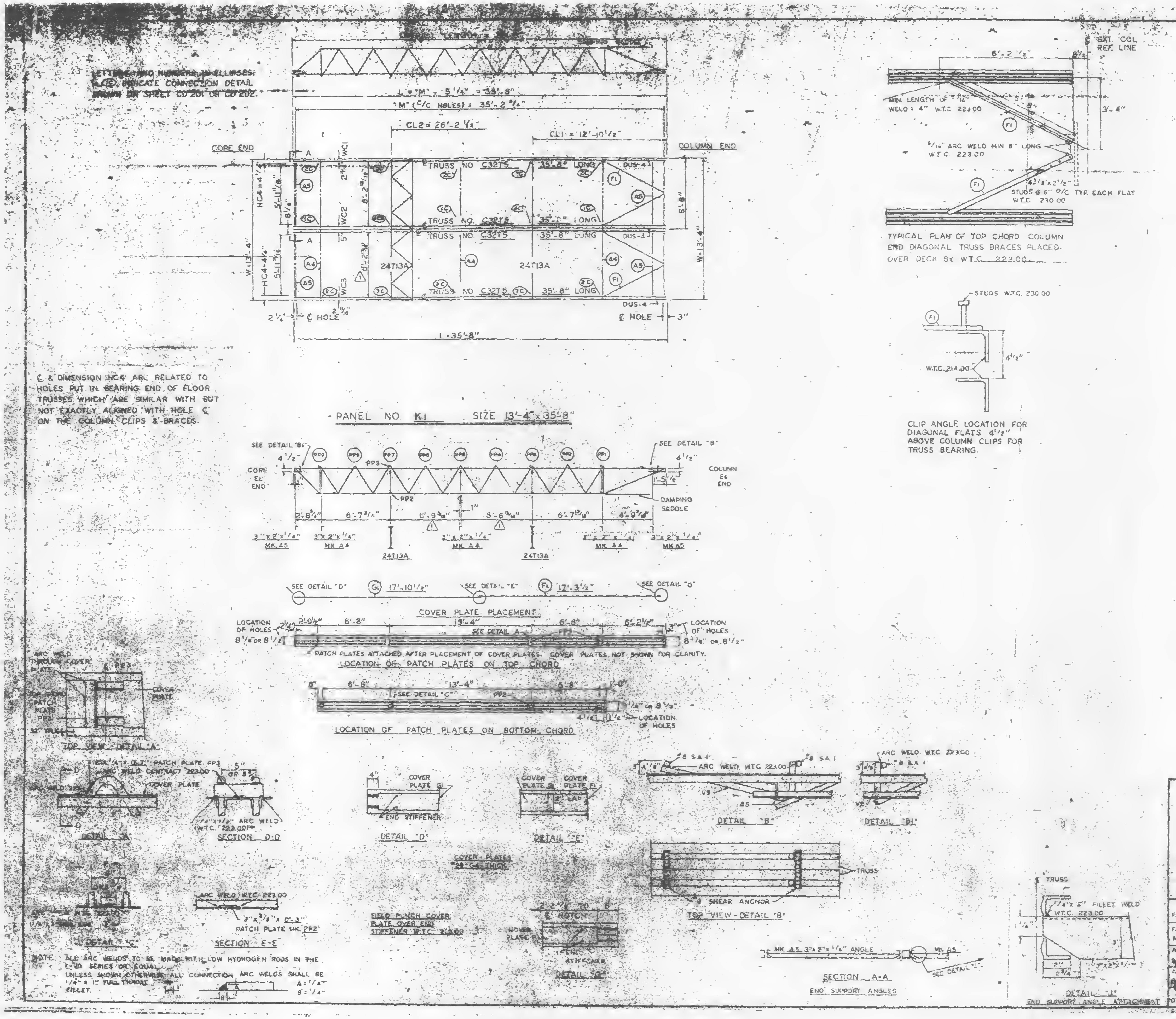
CHRISTIANSEN ROBERTSON
Structural & Civil Engineers
X
2/18/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92, (EAST & WEST)
PANEL J2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-[illegible]	PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JAN 3, 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-J2



LETTERS AND NUMBERS IN ELLIPSES: E.G. ⑫ INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET. A = 1/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF-DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	2T13A - 13'-3"	ST213A
3"x2"x1/4" ANGLE	A4	3	3"x2"x1/4"x 13'-3"	ST 403
	A5	4	3"x2"x1/4"x 6'-1 13/16"	ST 403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST 402
PATCH PLATES	PP3	8	2"x 1/4"x 0'-7"	ST 400
	PP2	8	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	2	7"x 0135"x 17'-10 1/2"	ST 303
	F1	2	7"x 0135"x 7'-3 1/2"	ST 303
ANGLE CLIPS	[illegible]	8	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
5 SHEAR ANCHOR	[illegible]	6	[illegible]	ST 400
DAMPING SADDLE	[illegible]	[illegible]	[illegible]	[illegible]
CONNECTION BAR	CB1	2	[illegible]	ST 400
CONNECTION PLATES	P1	3	[illegible]	ST 400
	P2	2	[illegible]	ST 400
	P3	2	[illegible]	ST 400

NO.	DATE	REVISION	
⚠2	6-23-69	AS NOTED	G.D.C.
⚠1	3-11-69	AS NOTED	G.D.C.

⚠2 REF. DRWG

7-AB3-20	7-22-68
7-AB4-31	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-1, 4	1-5-69
7-AB3-3	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-8	7-22-66
7-AB4-42 & 3	10-15-68

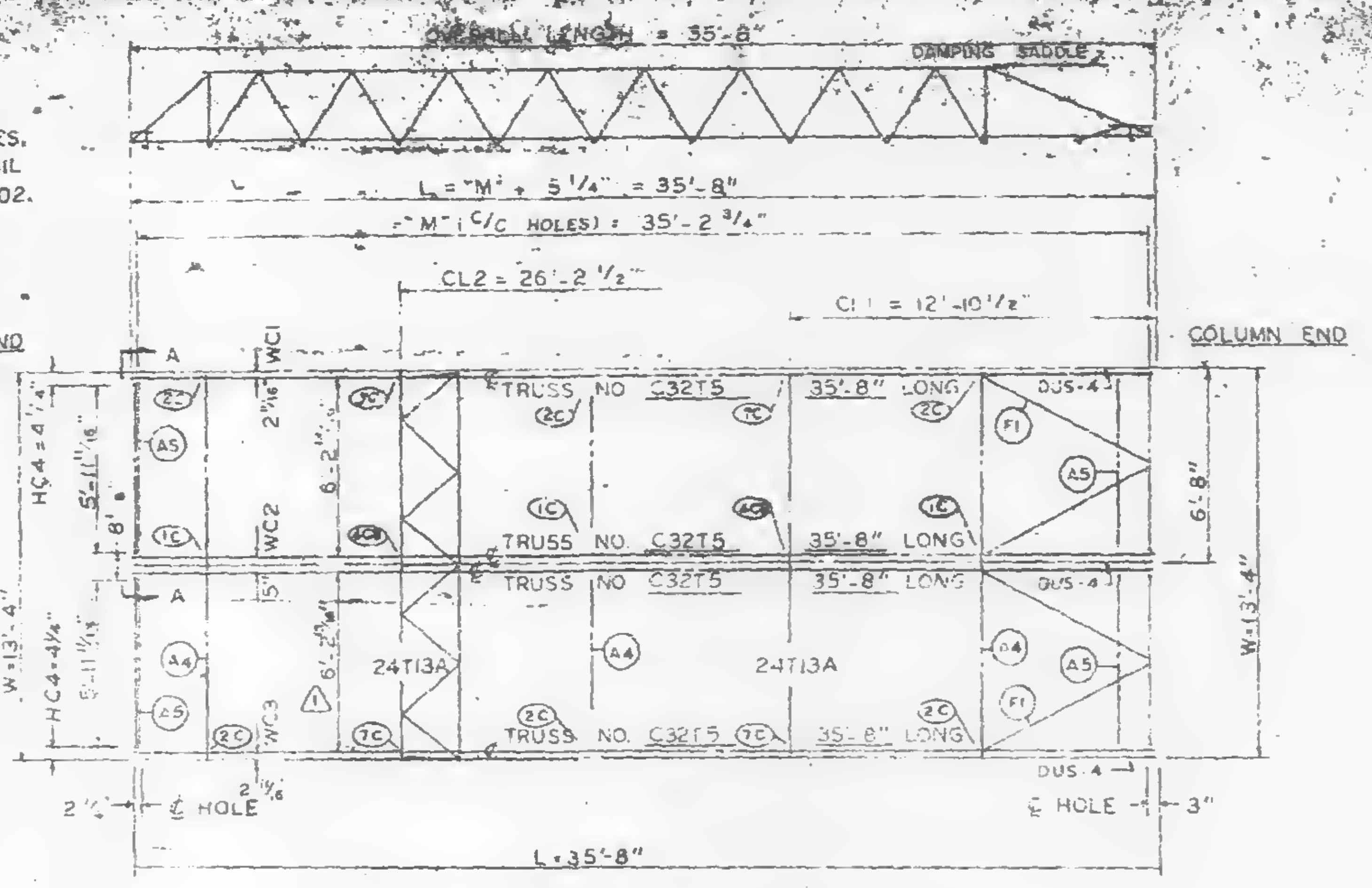
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49(WEST), 80-83(EAST)
PANEL K1 13'-4" x 35'-8"
BLDG. B FLOORS 45-49(SOUTH) 80-83(NORTH)

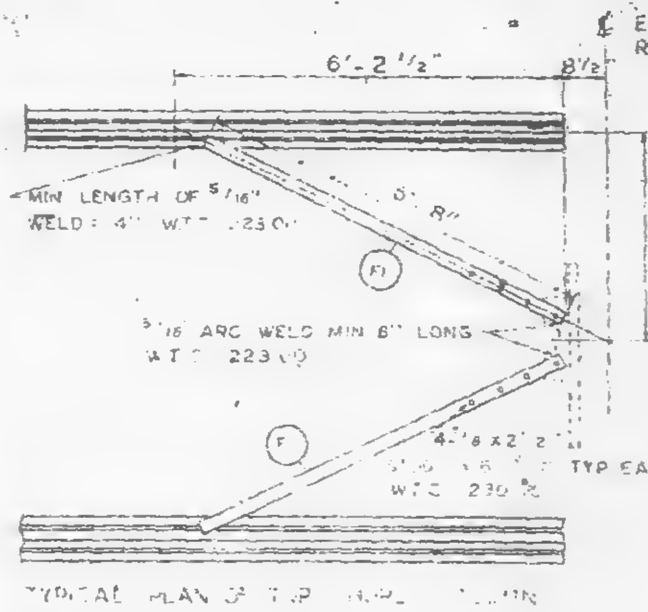
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT - MADISON, ILLINIOIS		DESIGN DRAWING NO. 7-AB3-20	PLATE
APPROVED FOR FABRICATION BY James White P.N.Y.A.	DATE 1/2/70	DRAWN BY ... DATE 1-30-69	
APPROVED FOR FABRICATION BY FABRICATOR LACLEDE STEEL CO.	DATE	CHECKED BY T.M. CHURA DATE 1-30-69	
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-K1

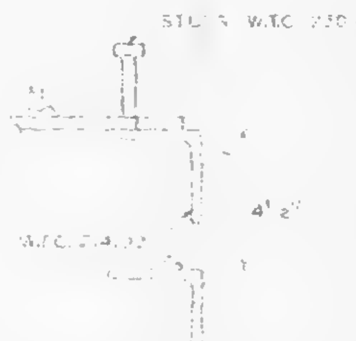
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.


6'-2 1/2"
℄ EXT. COL REF. LINE
MIN LENGTH OF 5/16" WELD: 4" W.T.C. 223.00
3'-4"
ARC WELD MIN 8" LONG W.T.C. 223.00
F1
TYP EACH FLAT
W.T.C. 230

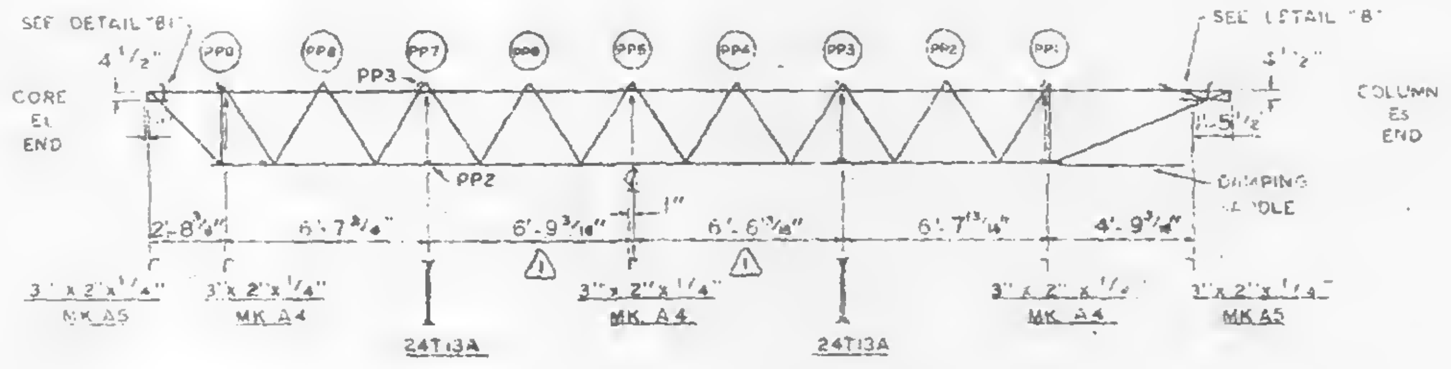
TYPICAL PLAN OF [illegible]

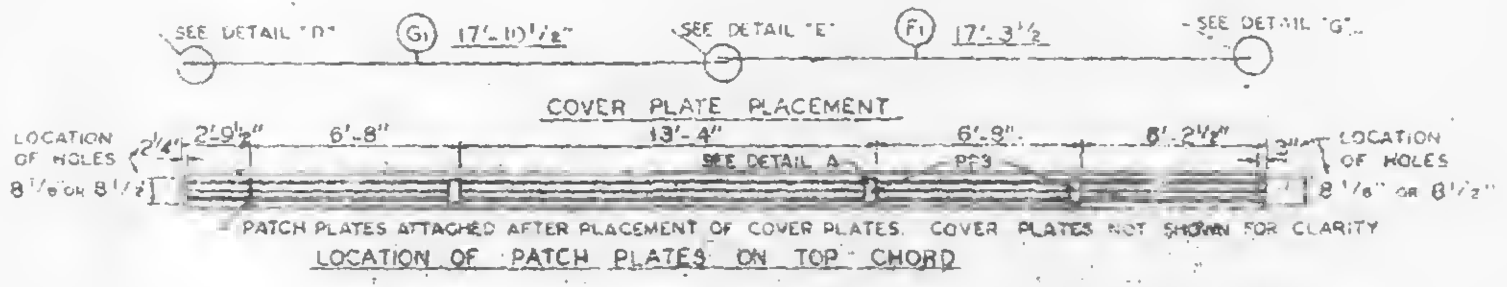


[illegible] LOCATION FOR [illegible] PLATES 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF.
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	13A	2	2T13A - 13'-3"	ST213A
3"x2"x1/4" ANGLE	A4	3	3"x2"x1/4"x13'-3"	ST402
	A5	4	3"x2"x1/4"x6'-1 1/8"	ST403
DIAGONAL FLATS	F1	8	1 1/2"x5/8"x6'-8"	ST402
PATCH PLATES	PP3	8	2"x1/4"x0'-7"	ST400
	PP2	8	3"x3/8"x0'-3"	ST400
COVER PLATES	G1	2	7"x.0135"x17'-10 1/2"	ST303
	F1	2	7"x.0135"x17'-3 1/2"	ST303
ANGLE CLIPS	C2	8	2 1/2"x1 1/2"x1/4"x6"	ST400
#8 SHEAR ANCHOR	SA1	6	#8 REBAR x 0'-7"	ST400
DAMPING SADDLE	DS-4	2	3 1/2"x3 1/2"x3/8"x3'-6 3/8"	ST228
CONNECTION BAR	CB1	2	1" ϕ x 1'-3"	ST400
CONNECTION PLATES	P1	3	3 1/2"x3/8"x0'-6 1/2"	ST400
	P2	2	4 1/2"x.30"x0'-9"	ST400
	P3	2	4 1/2"x.30"x1'-0"	ST400

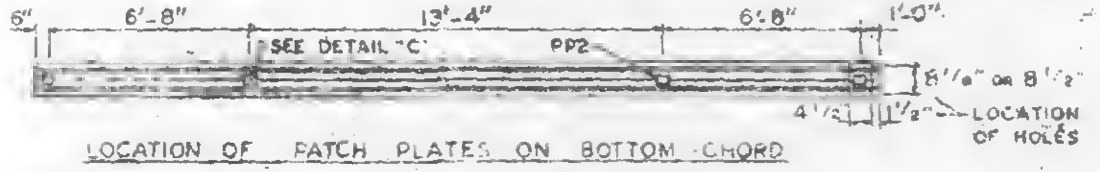
PANEL NO. KR1 SIZE 13'-4" x 35'-8"



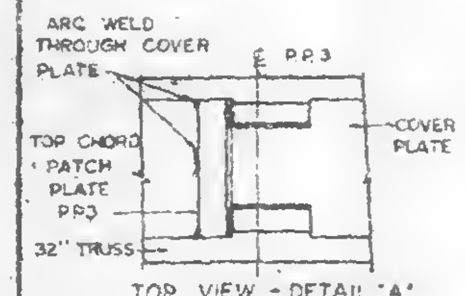


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

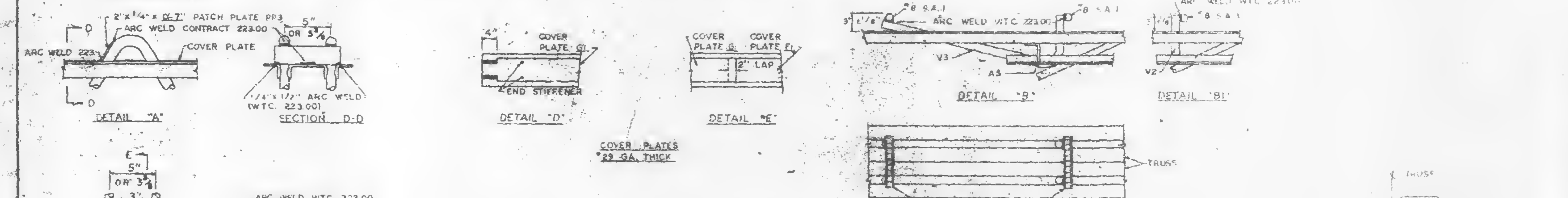
LOCATION OF PATCH PLATES ON TOP CHORD

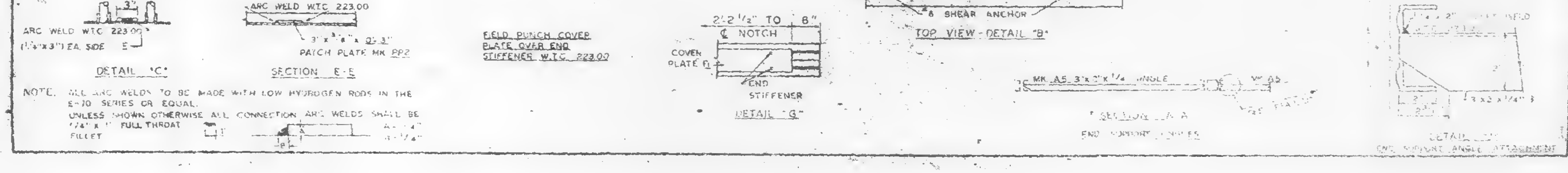


LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"





NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET

NO.	DATE	REVISION	BY
2	6-23-69	AS NOTED	G.D.C.
1	3-11-69	AS NOTED	G.D.C.

2 REF. DRWG.

7-AB3-21	8-22-68
7-AB4-3	[illegible]
7-AB4-13	7-22-68
7-AB4-36	7-22-68
SA-124	1-6-69
7-AB3-2	8-3-68
7-AB1-1	7-22-68
7-AB2-8	7-22-68
7-AB4-5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

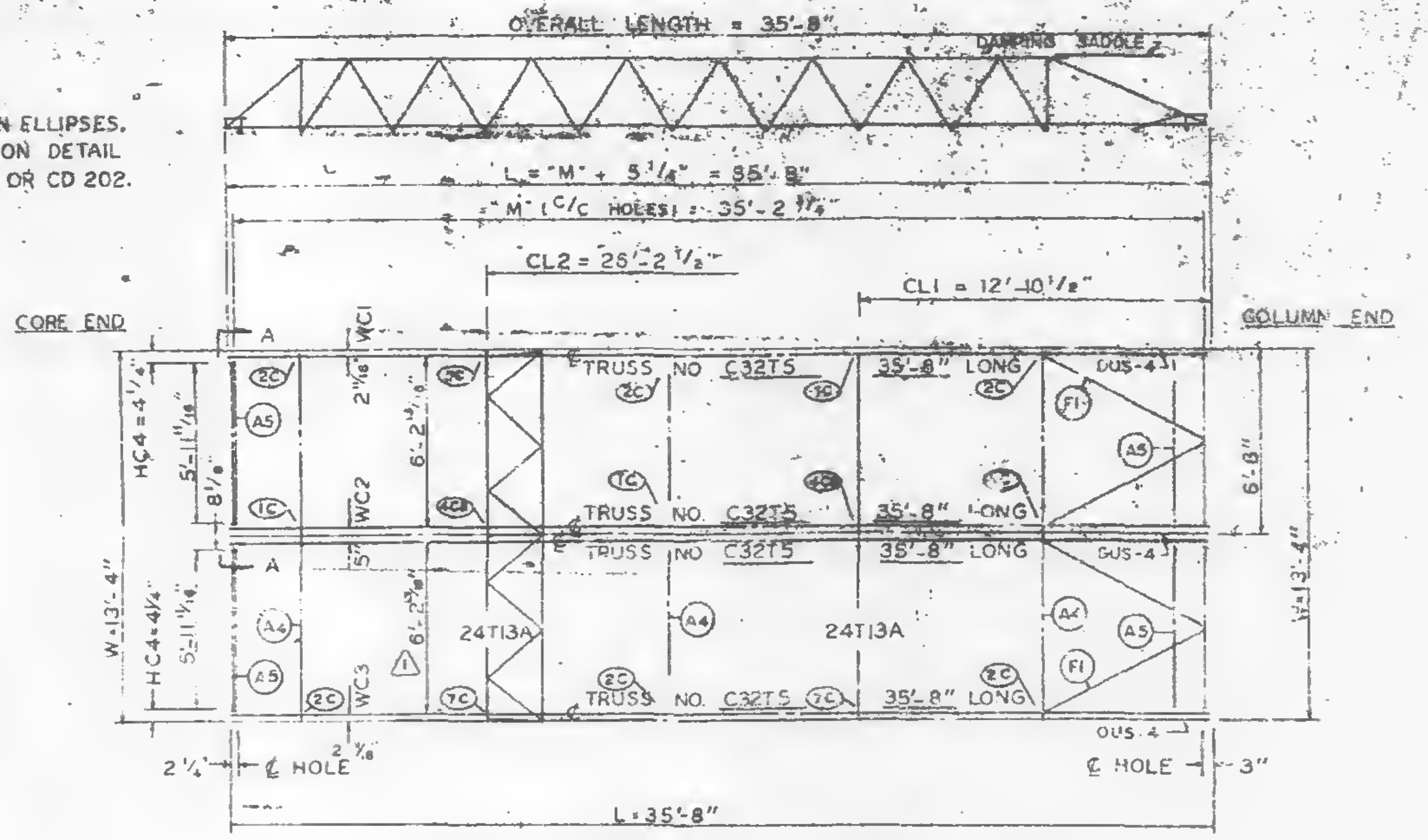
BLDG. A FLOORS 46-49 (EAST), 79-83 (WEST)
PANEL KR1 13'-4" x 35'-8"
BLDG. B FLOORS 46-49 (NORTH) 79-83

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-21
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A	DATE 7/2/70	DRAWN BY DATE 1-10-69
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR	DATE	CHECKED BY T.W. DATE 1-10-69
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. W.T.C. 22

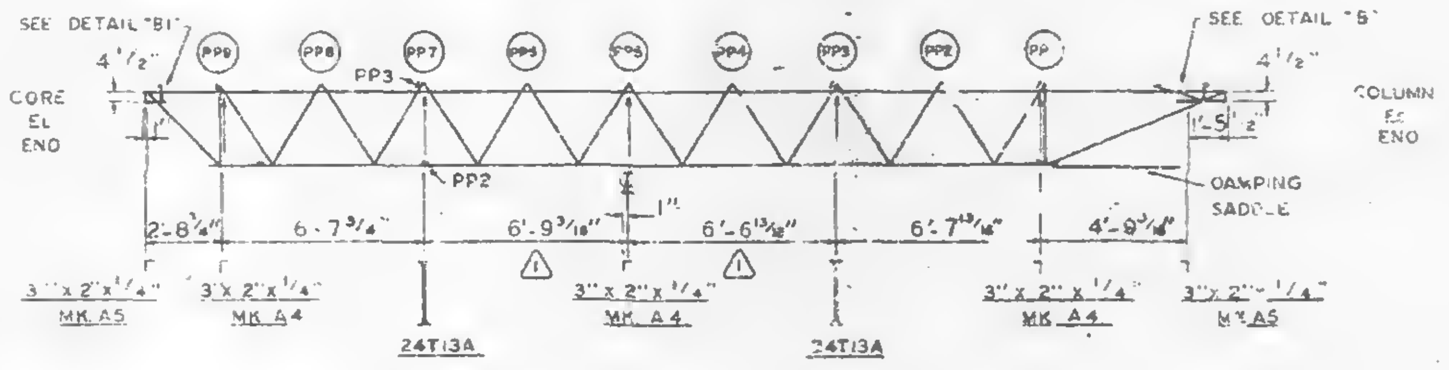
SHEET NO. KR1

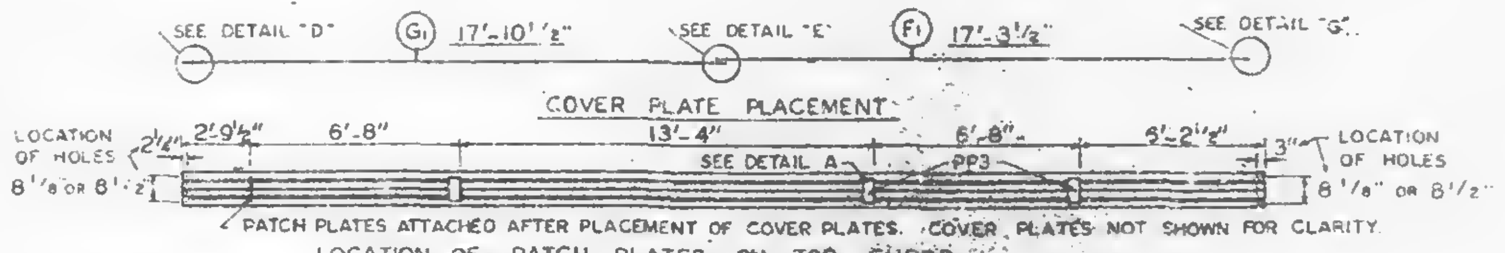
LETTERS AND NUMBERS IN ELLIPSES, e.g. (5E), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



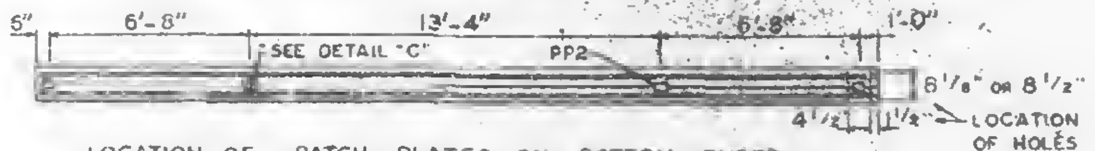
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. KR1 SIZE 13'-4" x 35'-8"

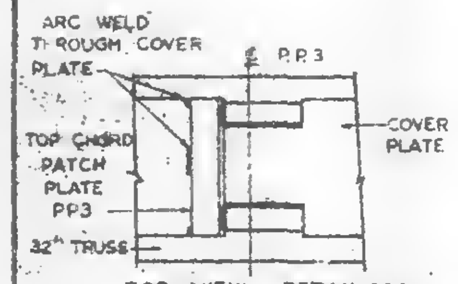




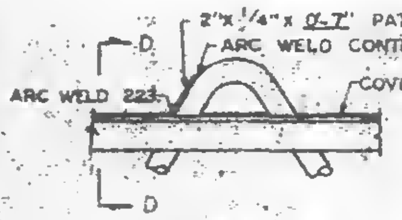
LOCATION OF PATCH PLATES ON TOP CHORD



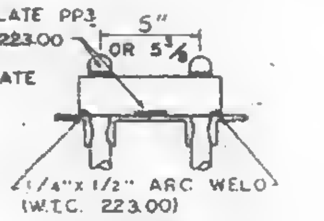
LOCATION OF PATCH PLATES ON BOTTOM CHORD



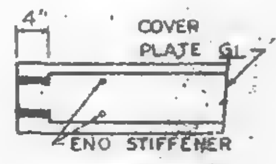
TOP VIEW - DETAIL "A"



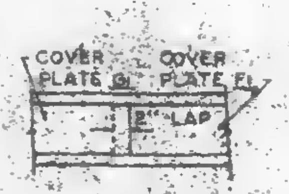
DETAIL "A"



SECTION D-D

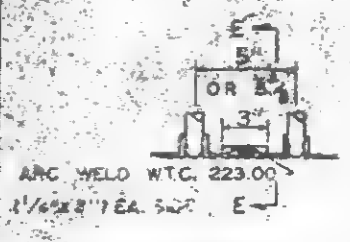


DETAIL "D"

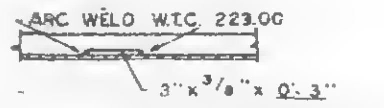


DETAIL "E"

COVER PLATES 28 GA. THICK

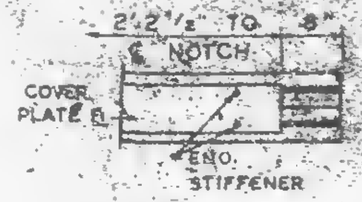


DETAIL "C"



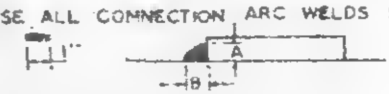
SECTION E-E

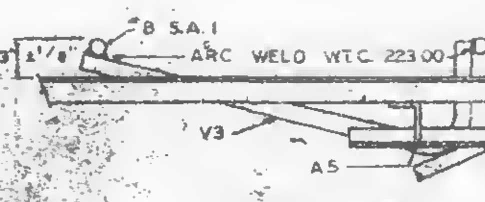
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



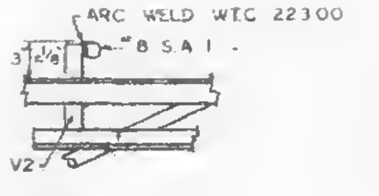
DETAIL "G"

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

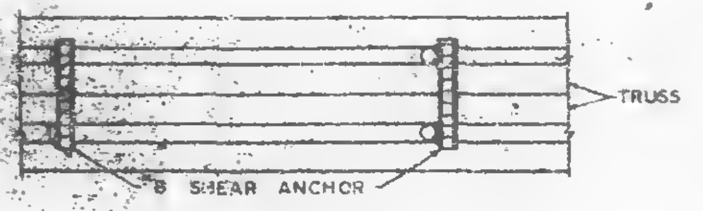




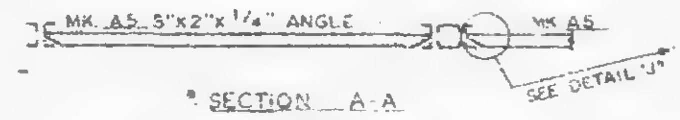
DETAIL "B"



DETAIL "B1"

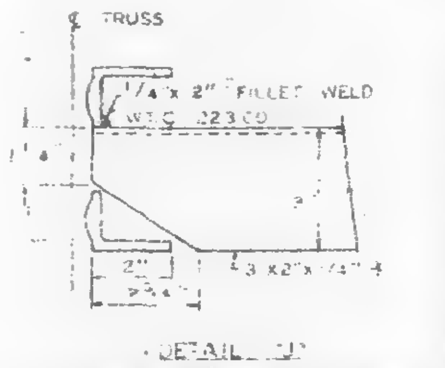


TOP VIEW - DETAIL "B"



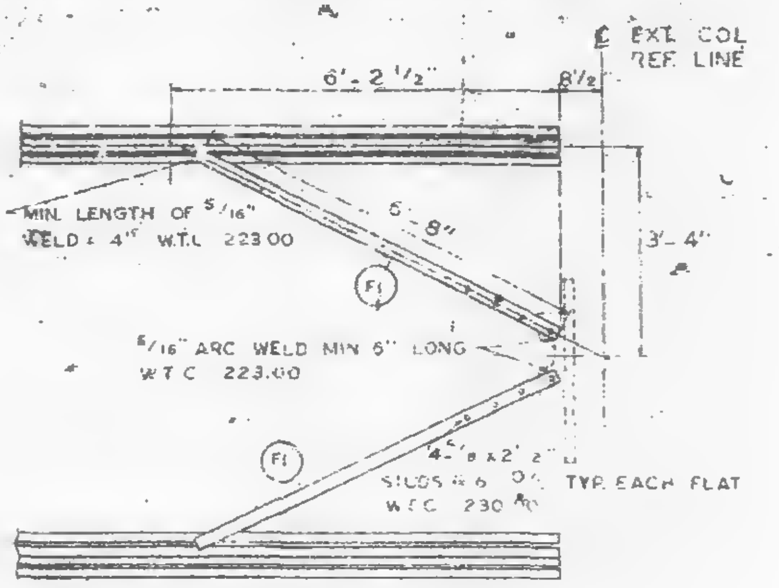
SECTION A-A

END SUPPORT ANGLES

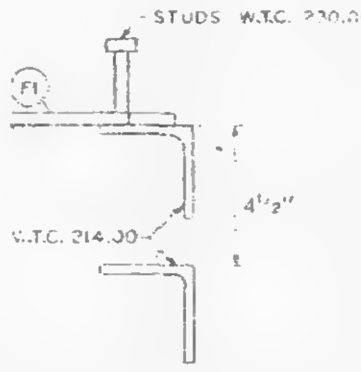


DETAIL "J"

END SUPPORT ANGLE ATTACHMENT


℄ EXT. COL REF. LINE
6'-2 1/2"
8 1/2
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
F1
4-5/8 x 2' 2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD OF ... END DIAGONAL TRUSS BRACES ... OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	2T13A - 13'-3"	BT213A
3"x2"x1/4" ANGLE	A4	3	3"x2"x1/4"x 13'-3"	ST 403
	A5	4	3"x2"x1/4"x 6'-1 13/16"	ST 403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST 402
PATCH PLATES	PP3	8	2"x1/4"x 0'-7"	ST 400
	PP2	8	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	[illegible]	2	7"x 0135"x 17'-10 1/2"	ST 303
	[illegible]	2	7"x 0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	2 1/2"x 1 1/2"x 1/4"x 6"	ST 400
#8 SHEAR ANCHOR	SA1	8	[illegible]	ST 400
DAMPING SADDLE	DUS-4	2	[illegible]	[illegible]298
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	[illegible]	ST 400
	P2	2	4 1/2"x .39"x 0'-9"	ST 400
	P3	2	4 1/2"x .39"x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-23-69	AS NOTED	G.D.
1	3-11-69	AS NOTED	G.D.

2 REF DRWG

7-A83-21	7-22-68
7-A84-31	1-3-68
7-A84-15 & 16	7-22-68
7-A84-39-41	7-22-68
SA-124	1-6-69
7-A83-2	1-3-68
7-A91-11 & 12	7-22-68
7-A82-8	7-22-68
7-A94-42 & 3	10-15-68

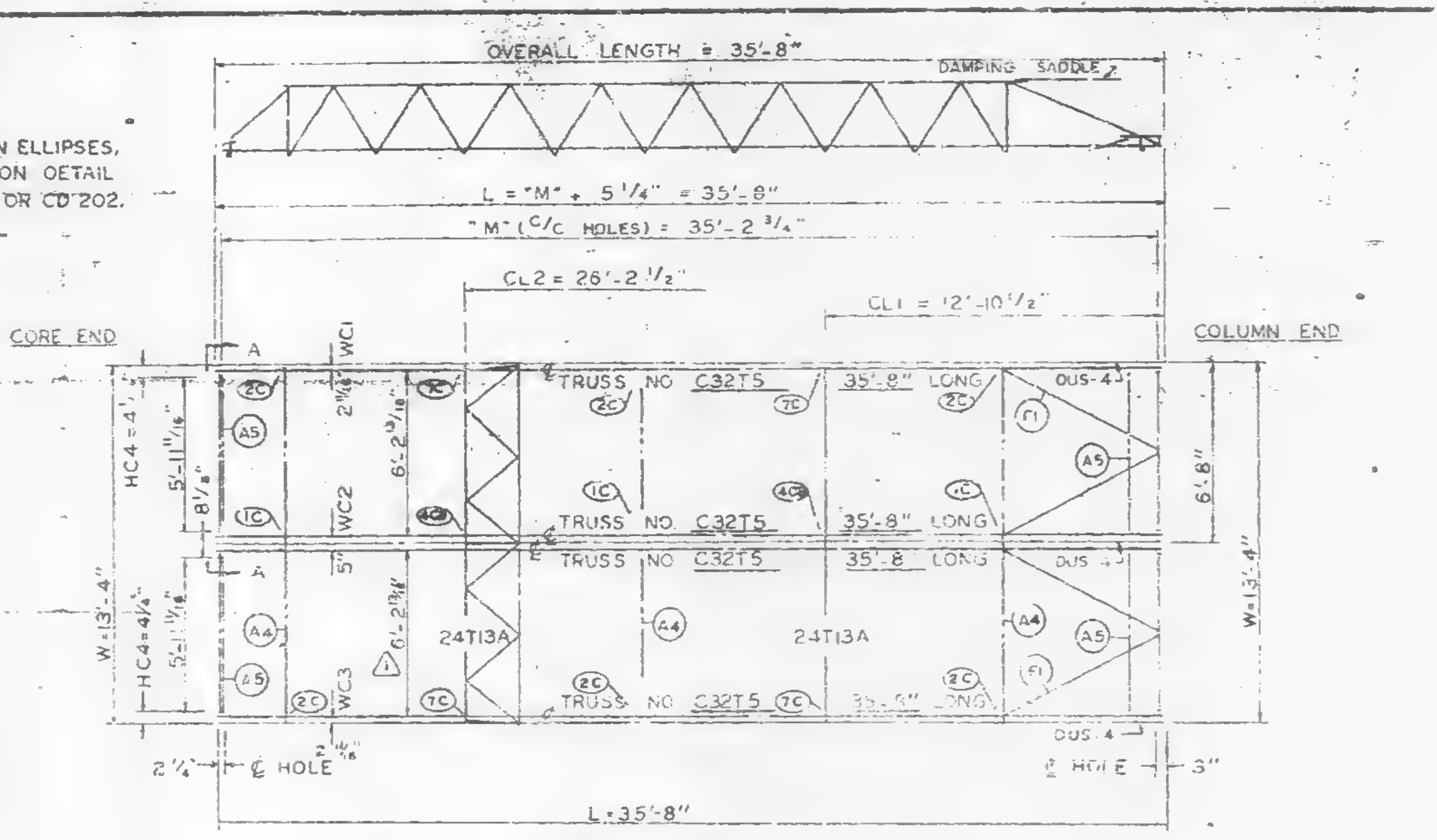
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46-49 (EAST), 79-83 (WEST)
PANEL KR1 13'-4" x 35'-8"
BLDG. B FLOORS 46-49 (NORTH) 79-83 (SOUTH) 2

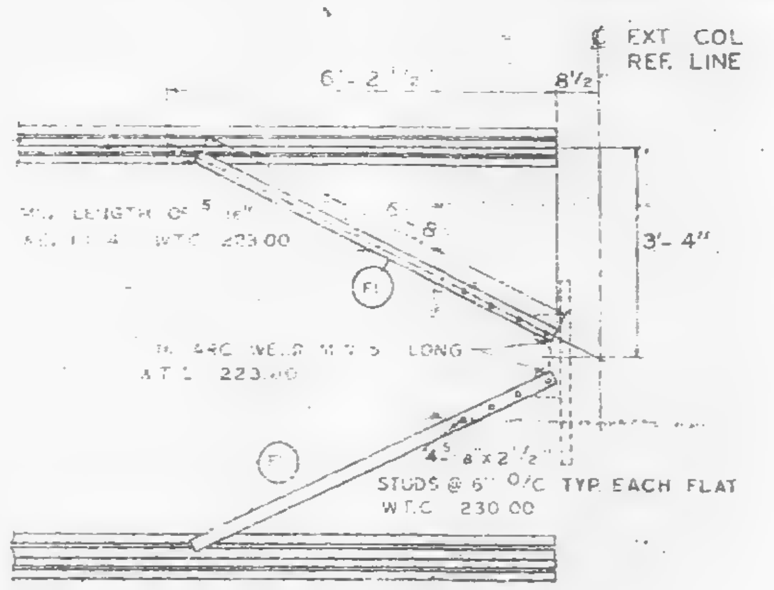
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-21	PLATE
APPROVED FOR FABRICATION BY James White	DATE 1/2/70	DRAWN BY [illegible] DATE 1-20-69	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE 1-30-69	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-KR1

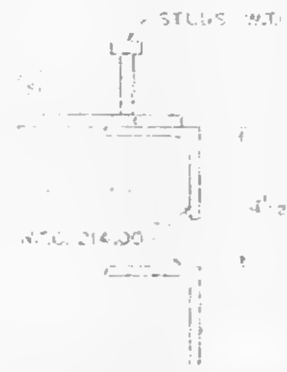
LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⒸ, INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

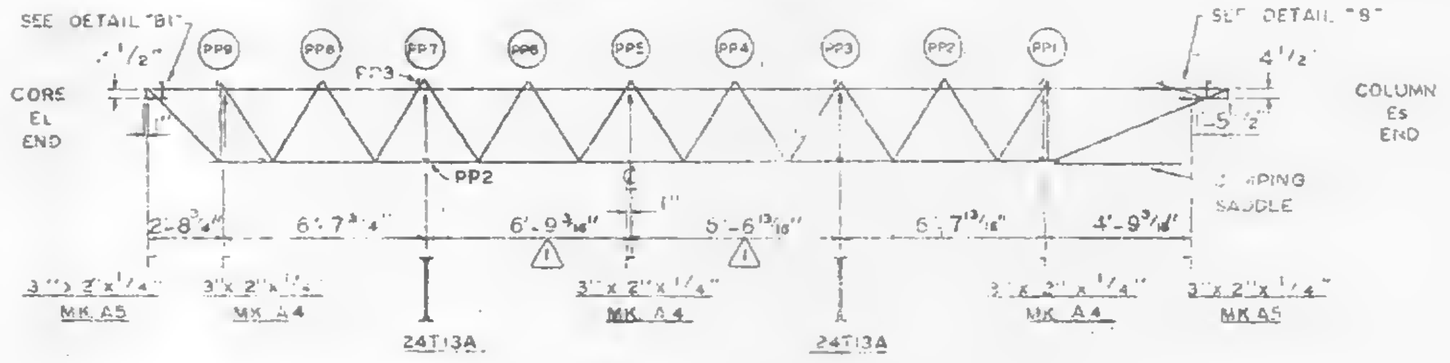


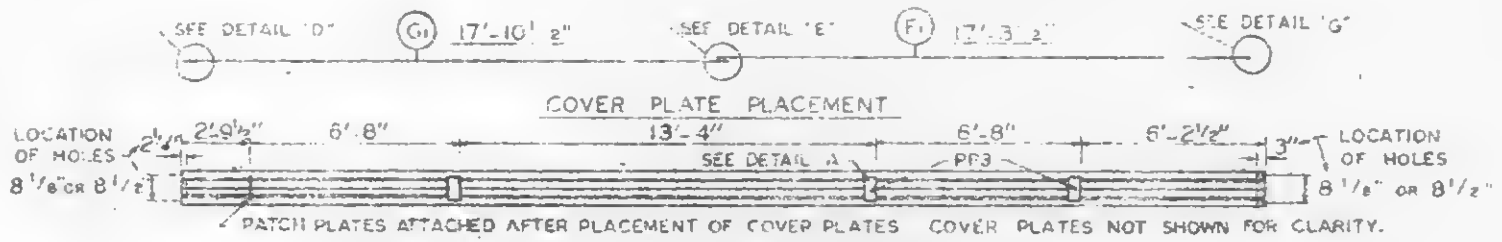
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES [illegible] BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

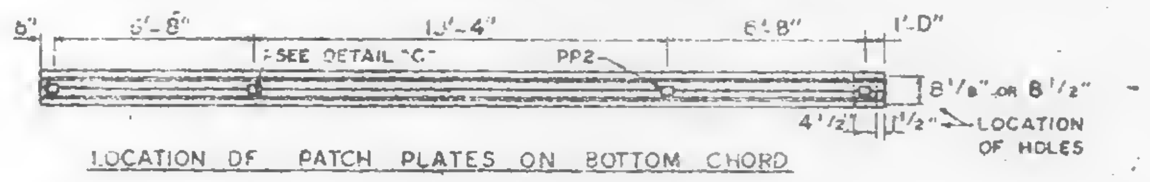
PANEL NO. K1 SIZE 13'-4" x 35'-8"



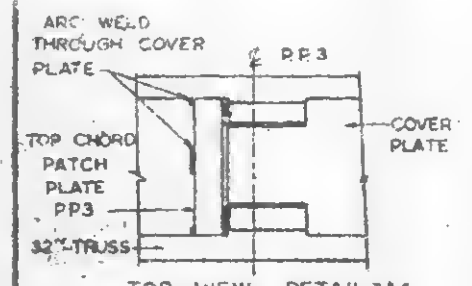


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

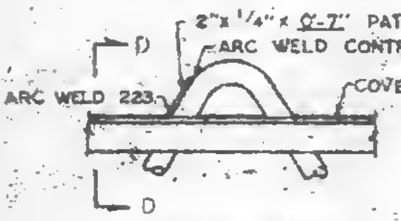
LOCATION OF PATCH PLATES ON TOP CHORD



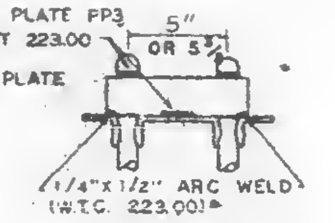
LOCATION OF PATCH PLATES ON BOTTOM CHORD



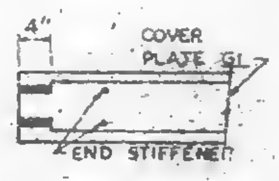
TOP VIEW - DETAIL "A"



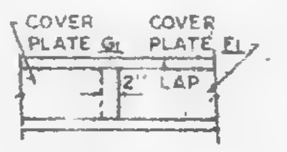
DETAIL "A"



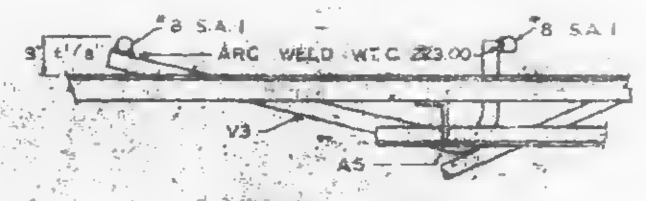
SECTION D-D



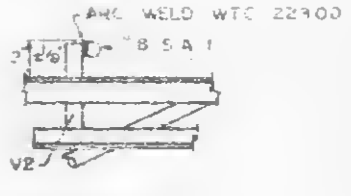
DETAIL "D"



DETAIL "E"

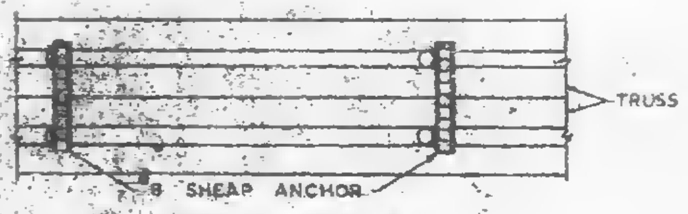


DETAIL "B"

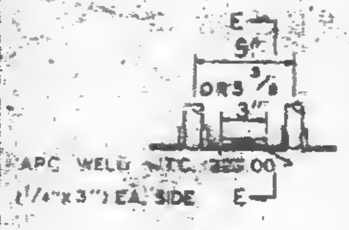


DETAIL "B1"

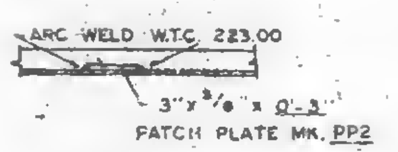
COVER PLATES 12 GA. THICK



TOP VIEW - DETAIL "B"

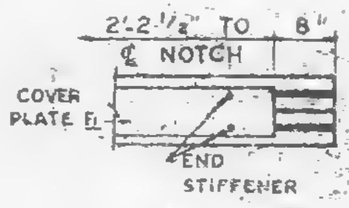


DETAIL "C"

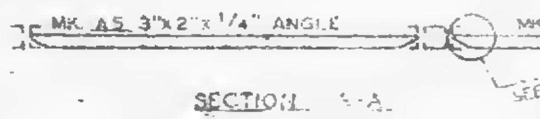


SECTION E-E

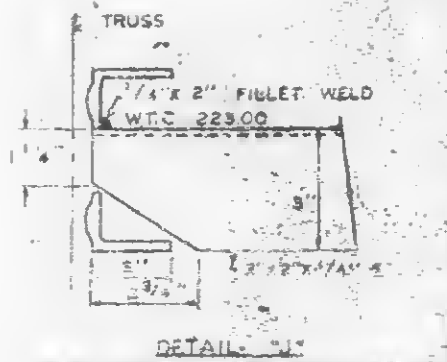
FIELD WINCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



DETAIL "G"



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	2T13A -13'-3"	ST213A
3" x 2" x 1/4" ANGLE	A4	3	3" x 2" x 1/4" x 13'-3"	ST403
	A5	4	3" x 2" x 1/4" x 8 1/4 13/16"	ST403
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP3	8	2" x 1/4" x 0'-7"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	2	7" x 0.135" x 17'-10 1/2"	ST303
	F1	2	7" x 0.135" x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	8	2 1/2 x 1 1/2 x 1/4" x 5"	ST 400
#8 SHEAR ANCHOR	SA	6	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	2	3 1/2" x 3 1/2" x 3/8" x 0'-6 7/8"	ST298
CONNECTION BAR	CB1	2	1" ∅ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/4"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P3	2	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
⚠2	6-23-69	AS NOTED	G.D.C.
⚠1	3-11-69	AS NOTED	G.D.C.

⚠2 REF. DRWG.

7-A83-20	7-22-68
7-A84-31	1-3-68
7-A84-15 & 16	7-22-68
7-A84-39-41	7-22-68
SA-124	1-5-65
7-A83-2	1-3-68
7-A81-11 & 12	7-22-68
7-A82-8	7-22-68
7-A84-42 &	10-15-68

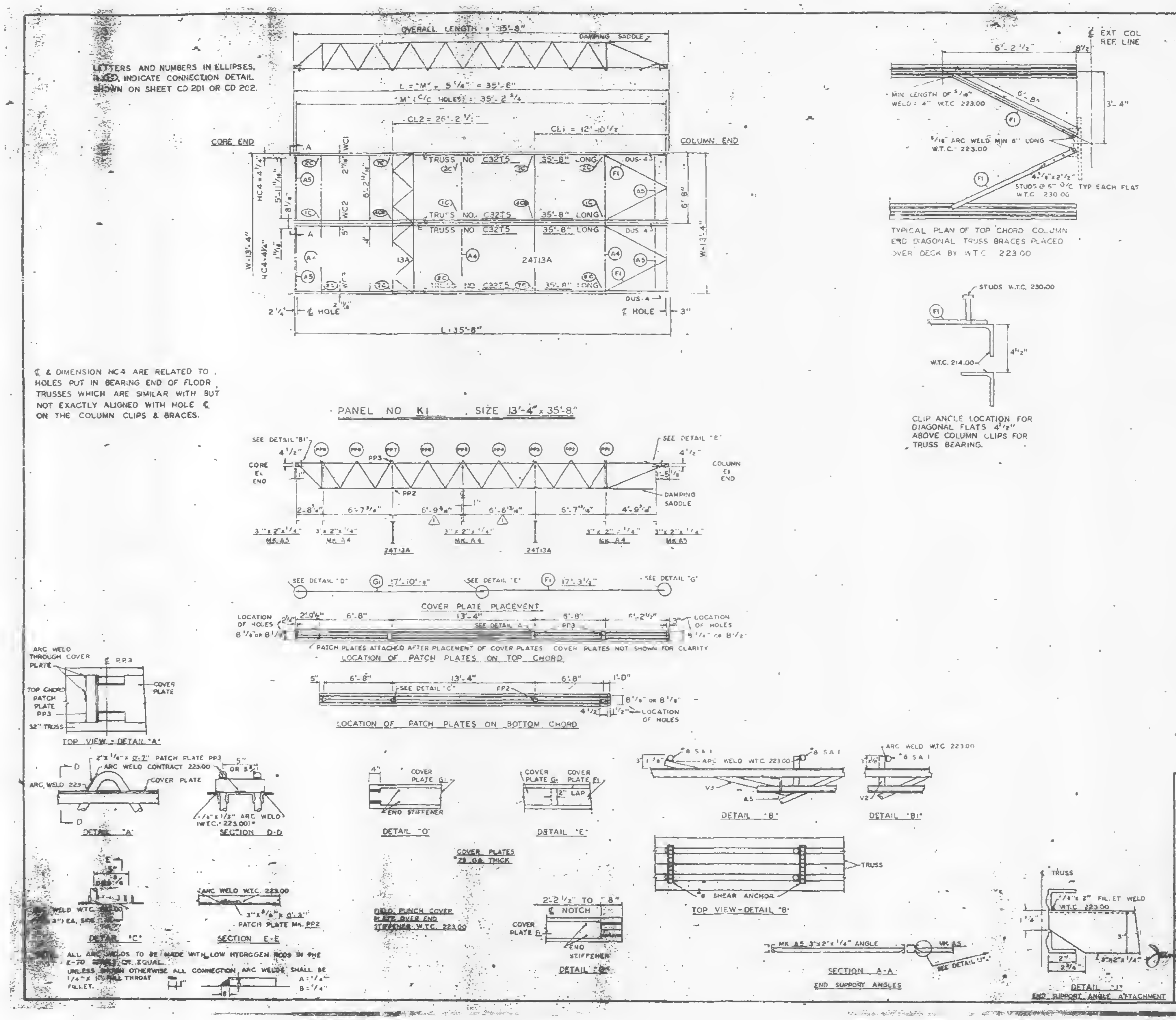
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49 (WEST), 80-83 (EAST)
PANEL K1
BLDG. B FLOORS 45-49 (SOUTH) 80-83 (NORTH) ⚠2

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-20
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 1/2/70
DRAWN BY [illegible] DATE 1-30-69
APPROVED FOR FABRICATION DATE
CHECKED BY T.M. [illegible] DATE 1-30-69
DETAILED BY LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. [illegible]

LETTERS AND NUMBERS IN ELLIPSES, INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.


OVERALL LENGTH = 35'-8"
DAMPING SADDLE
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 20'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T5 35'-8" LONG
24T13A
2 1/4" ℄ HOLE
℄ HOLE 3"
L = 35'-8"
W = 13'-4"
PANEL NO. K1 SIZE 13'-4" x 35'-8"
SEE DETAIL "B1"
SEE DETAIL "B"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
DETAIL "B"
DETAIL "B1"
COVER PLATES 22 GA. THICK
DETAIL "C"
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL "G"
TOP VIEW - DETAIL "8"
SECTION A-A
END SUPPORT ANGLES
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
STUDS W.T.C. 230.00
℄ EXT COL REF LINE

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	2T13A - 13'-3"	BT213A
3" x 2" x 1/4" ANGLE	A4	3	3" x 2" x 1/4" x 13'-3"	ST 403
	A5	4	3" x 2" x 1/4" x 6'-[illegible]	[illegible]
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP3	8	2" x 1/4" x 0'-7"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	2	7" x 0.135" x 17'-10 1/8"	ST 303
	F1	2	7" x 0.135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	6	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P3	2	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	3-11-69	AS NOTED	G.D.C.

REF DRWG

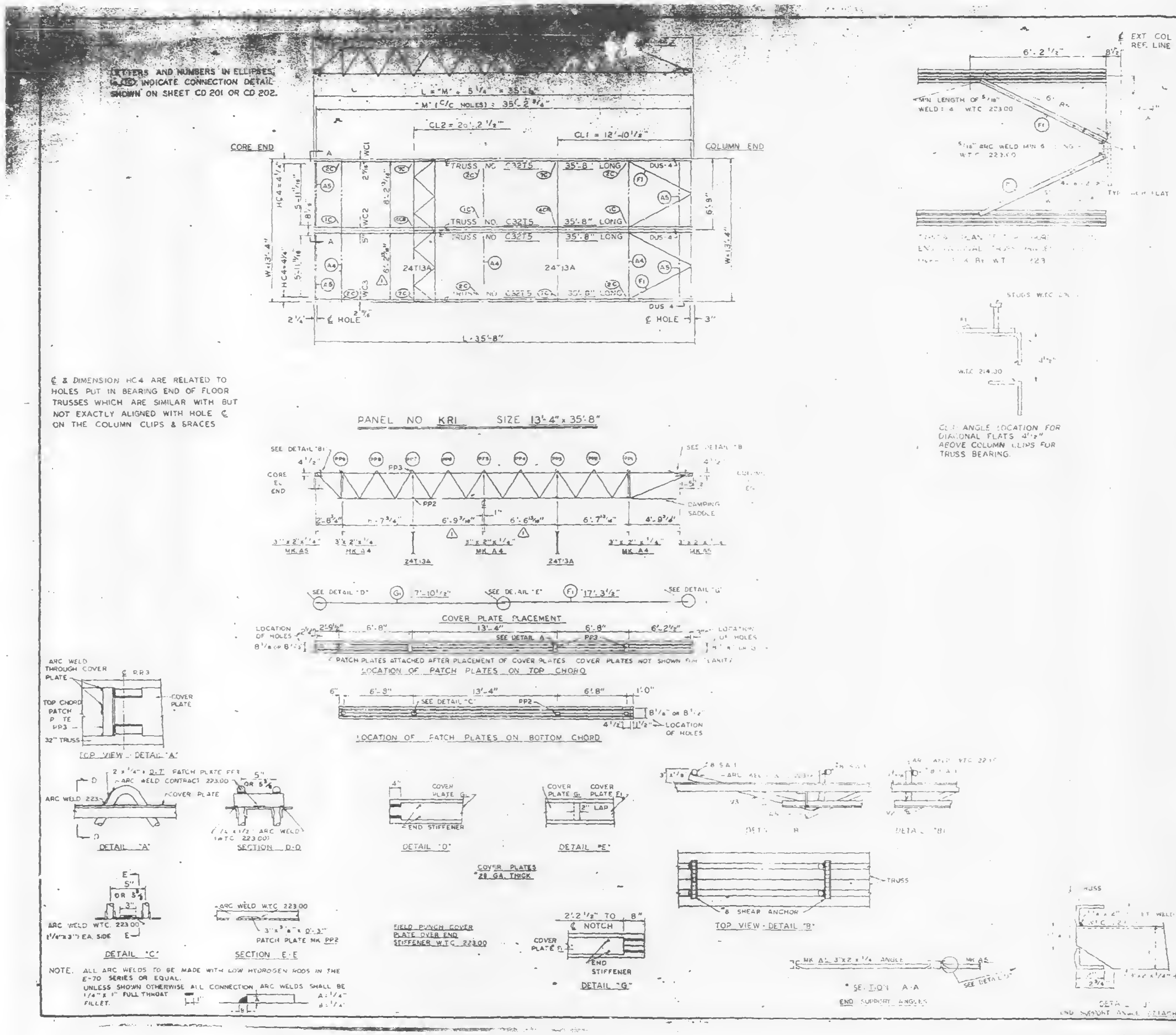
7-AB3-20	7-22-68
-AB4-3 & 31	1-3-68
7-AB4-5 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-5-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-8	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49 (WEST), 80-83 (EAST)

PANEL K1 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-20
PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A. DATE 3/24/69
DRAWN BY E.B. DATE 1-20-69
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHARK DATE 1-30-69
LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-K1


CORE END
COLUMN END
L = "M" + 5 1/4" = 35'-6"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 20'-2 1/2"
CL1 = 12'-10 1/2"
TRUSS NO. C32T5 35'-8" LONG
24T13A
DUS-4
W = 13'-4"
HC4 = 4 1/2"
L = 35'-8"
℄ HOLE
PANEL NO KR1 SIZE 13'-4" x 35'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
DETAIL "C"
SECTION E-E
DETAIL "G"
COVER PLATES 28 GA THICK
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
TOP VIEW - DETAIL "B"
8 SHEAR ANCHOR
SECTION A-A
END SUPPORT ANGLES
6'-2 1/2"
EXT COL REF LINE
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
STUDS W.T.C.
ARC WELD W.T.C. 223.00
3"x3/8"x 0'-3" PATCH PLATE MK PP2
A = 1/4"
B = 1/4"

LETTERS AND NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	27T13A - 13'-3"	BT213A
3"x2"x1/4" ANGLE	A4	3	3"x2"x1/4"x13'-3"	ST403
	A5	4	3"x2"x1/4"x 6'-1 13/16"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
PATCH PLATES	PP3	8	2"x 1/4"x 0'-7"	ST 400
	PP2	8	3"x 3/8"x 0'-3"	ST 402
COVER PLATES	G1	2	7"x 0.135 x 17'-10 1/2"	ST303
	F1	2	7"x 0.135 x 17'-3 1/2"	ST303
[illegible] CLIPS	C2	8	2 1/2" x 1 1/2" x 1/4" x [illegible]	ST 400
[illegible] ANCHOR	SA1	6	#8 REBAR x 0'-7"	ST 400
[illegible] SADDLE	DUS4	2	3 1/2"x 3 1/2" x 3/8"x 7 5/8"	ST298
[illegible] BAR	CB1	2	1"⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2"x 3/4"x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-5"	ST 400
	P3	2	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	3-11-69	AS NOTED	G.D.C.

REF DRWG

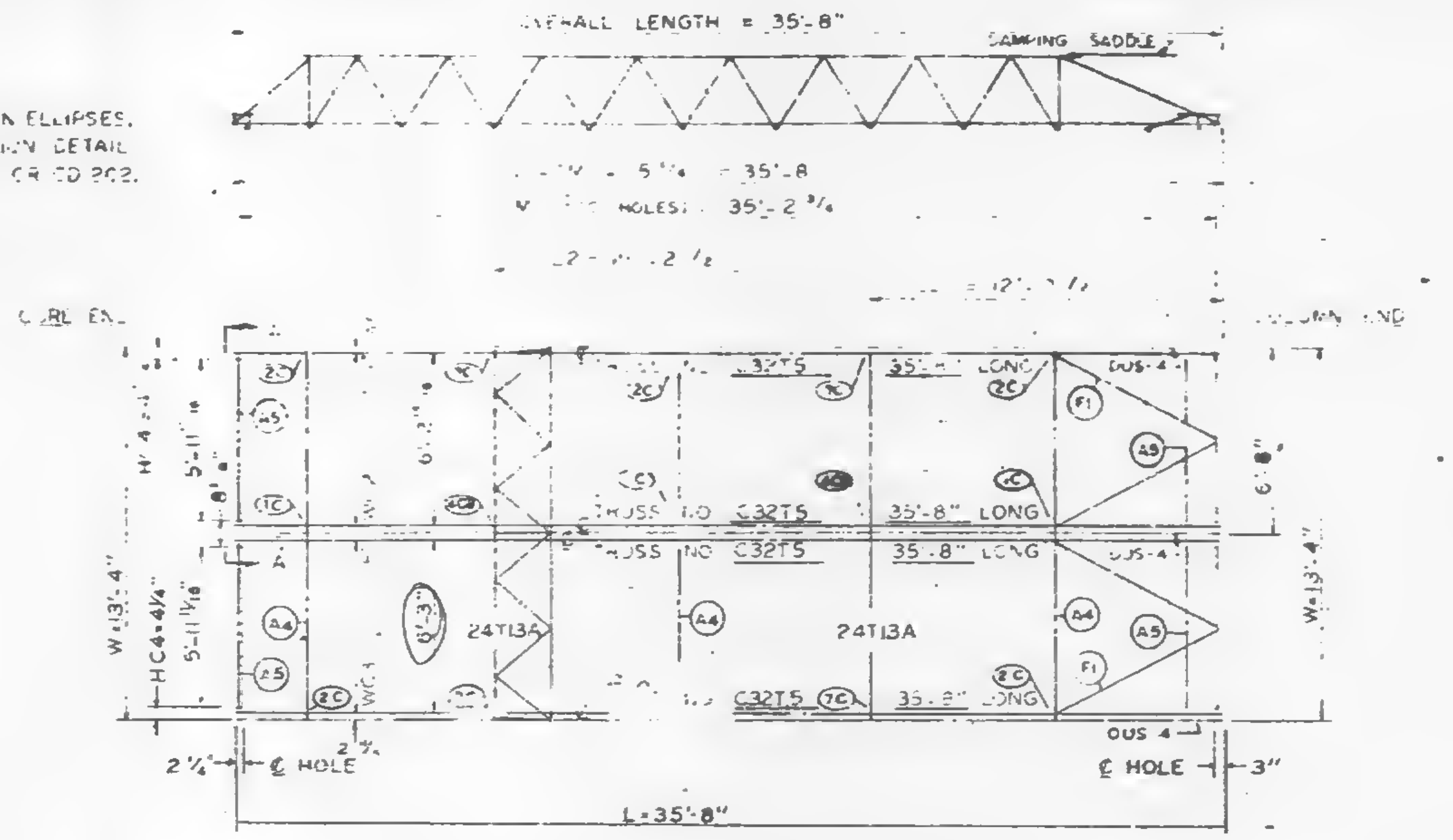
7-AB3-21	7-22-68
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4-33-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-8	7-22-58
7-AB4-42	10-15-68

OR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 46-49 (EAST), 79-83 (WEST)
PANEL KR1 = 13'-4" x 35'-8"

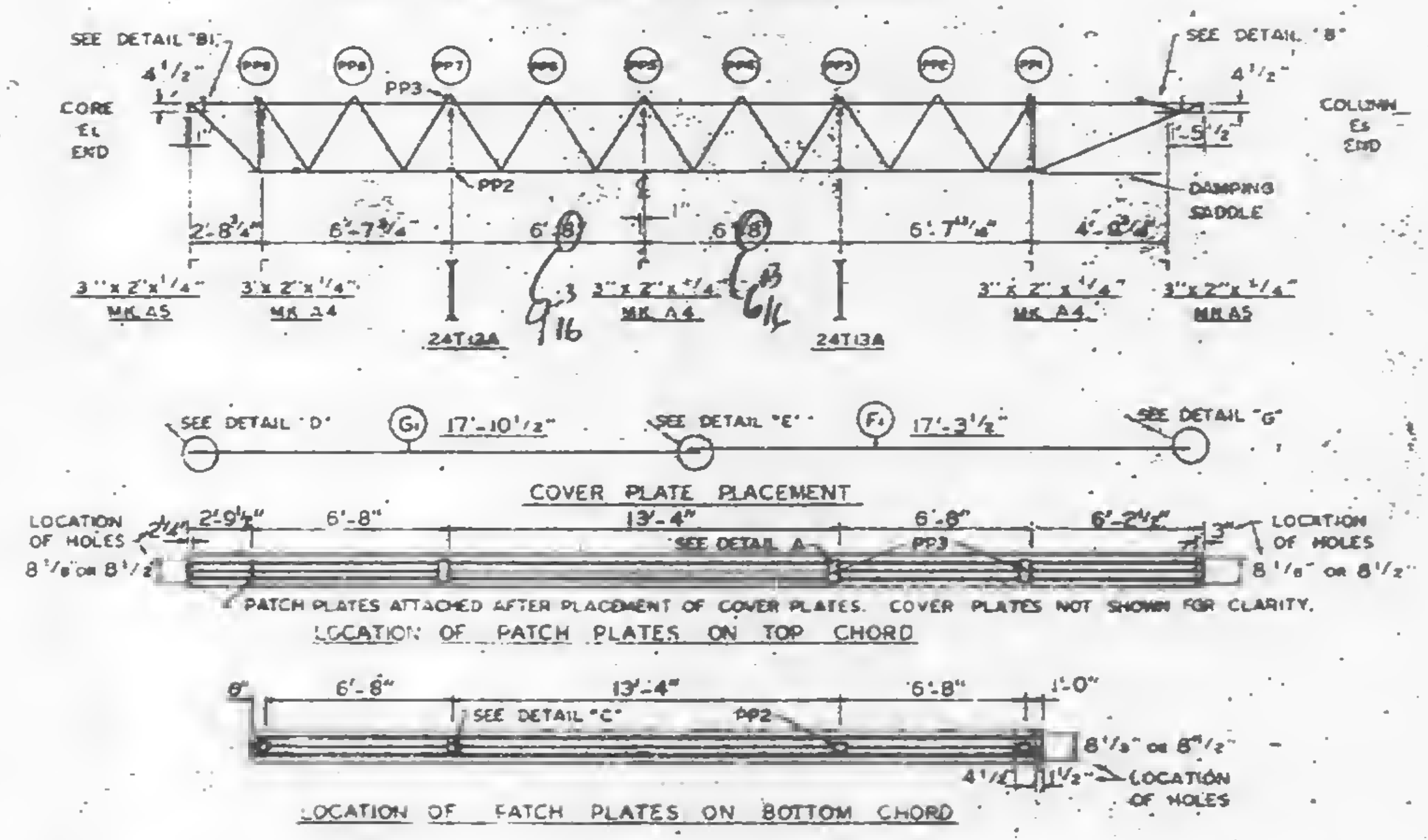
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-21 PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 3/24/69
DRAWN BY [illegible] DATE 1-20-69
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.N. CHURA DATE 1-?-69
CHECKED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO. FP-KR1

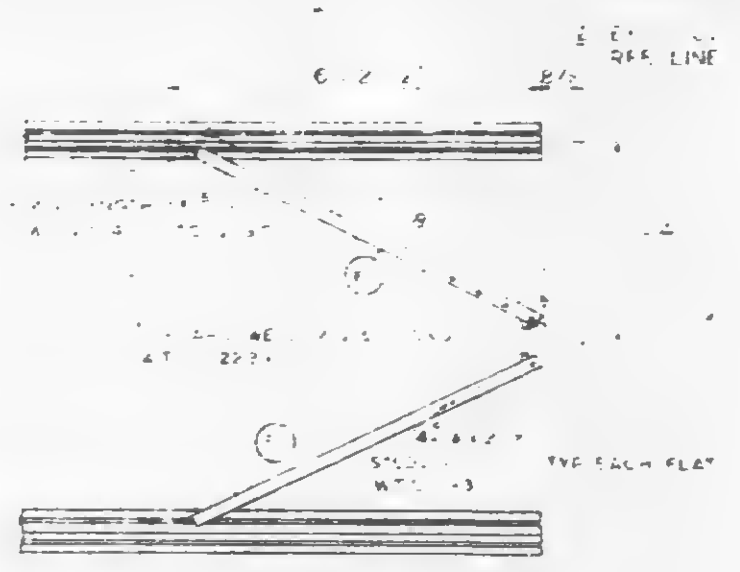
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



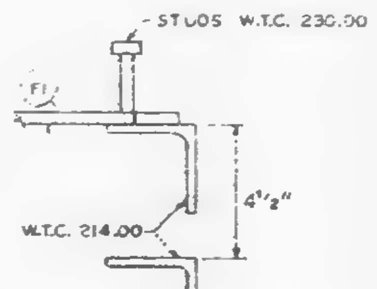
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO K1 SIZE 13'-4" x 35'-8"



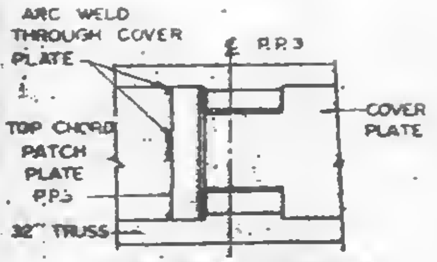


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES WELDED OVER DECK BY W.T.C. 223.00

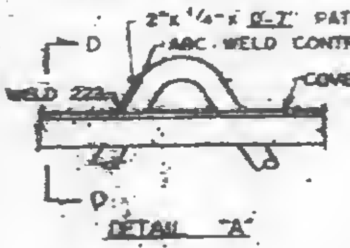


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

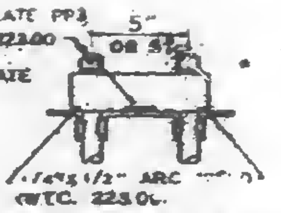
REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
[illegible] TRUSSES	T5	4	[illegible]	ST 205
[illegible] TRUSSES	T34	2	2" 3A - 13'- 3"	BT2·3A
[illegible]	A4	3	[illegible] × 13'-3"	ST 403
	A5	4	[illegible]	ST 403
DIAGONAL FLAT	F	4	[illegible]	ST 412
PATCH PLATES	PP3	8	2" × [illegible]	ST 400
	PP2	8	[illegible]	ST 400
COVER PLATES	G1	2	7" × 0.035" × 17'-10½"	ST 303
	F1	2	7" × 0.035" × 17'-3½"	ST 303
ANGLE CLIPS	C2	8	2½" × 1½" × ¼" × 6"	ST 400
#8 SHEAR ANCHOR	SA1	6	#8 REBAR × 0'-7"	ST 400
DAMPING SADDLE	DS4	2	[illegible]	ST 298
CONNECTION BAR	CB1	2	1" ⌀ × 1'-3"	ST 400
CONNECTION PLATES	P1	3	3½" × ⅜" × 0'-6½"	ST 400
	P2	2	4½" × .39" × 0'-9"	ST 400
	P3	2	4½" × .39" × 1'-0"	ST 400



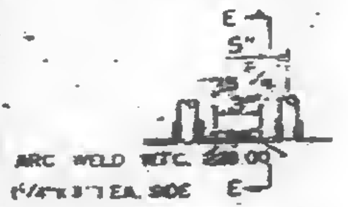
TOP VIEW - DETAIL "A"



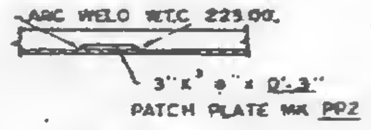
DETAIL "A"



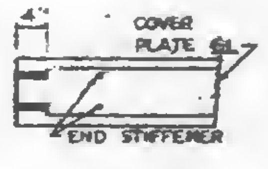
SECTION D-D



DETAIL "C"



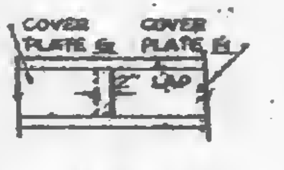
SECTION E-E



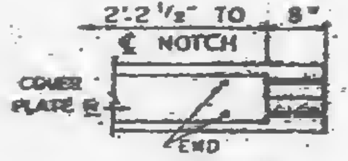
DETAIL "D"

COVER PLATE 16 GA. STOCK

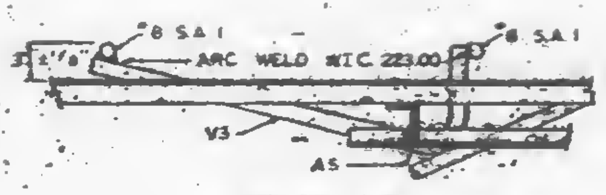
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



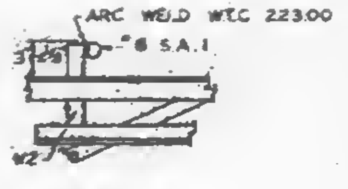
DETAIL "E"



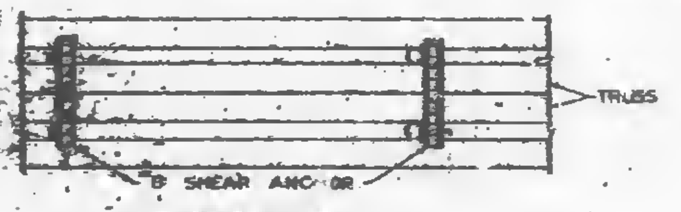
DETAIL "G"



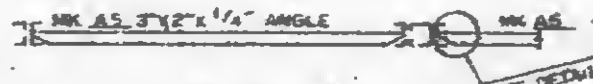
DETAIL "B"



DETAIL "B1"

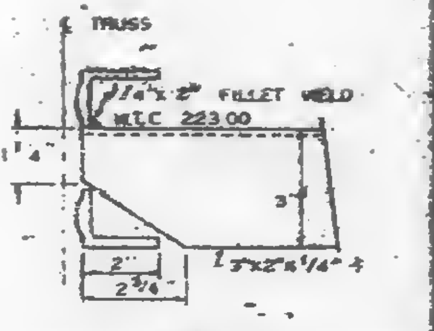


TOP VIEW - DETAIL "H"



SECTION A-A

END SUPPORT ANGLES



DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼ x 1" FULL THROAT FILLET

A = ¼"
B = ¼"

REF DRWG	
7-AB3-20	7-22-68
7-AB4-3 & 31	1-3-68
7-AB4-5 & 10	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-8-69
7-AB3-2	1-2-68
7-AB1-11 & 12	7-22-68
7-AB2 8	7-22-68
7-AB4-42	10-16-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER, N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

RECEIVED

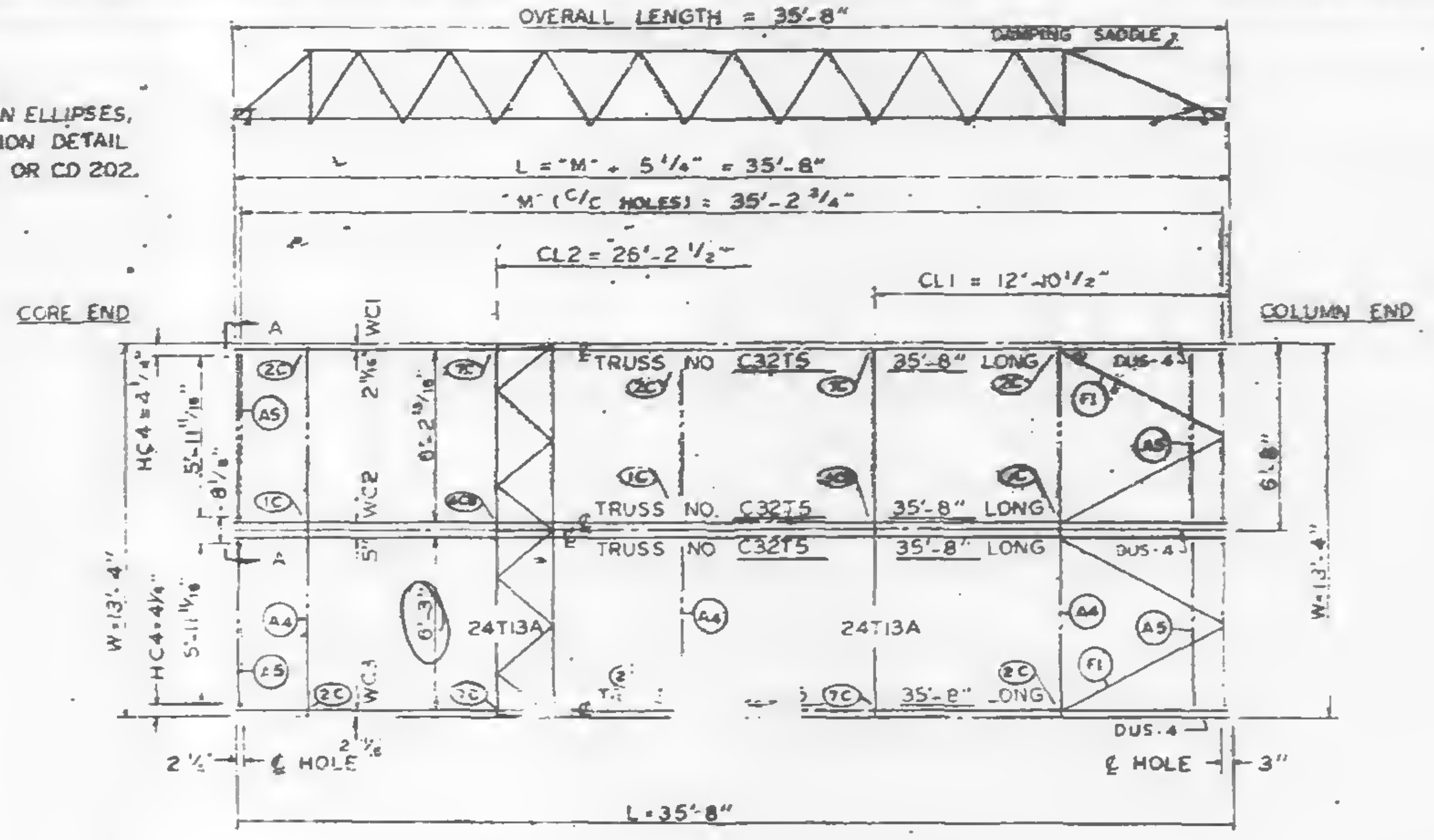
BLDG. A FLOORS 45-49(WEST), 80-83(EAST)

PANEL K1 13'-4" x 35'-8"

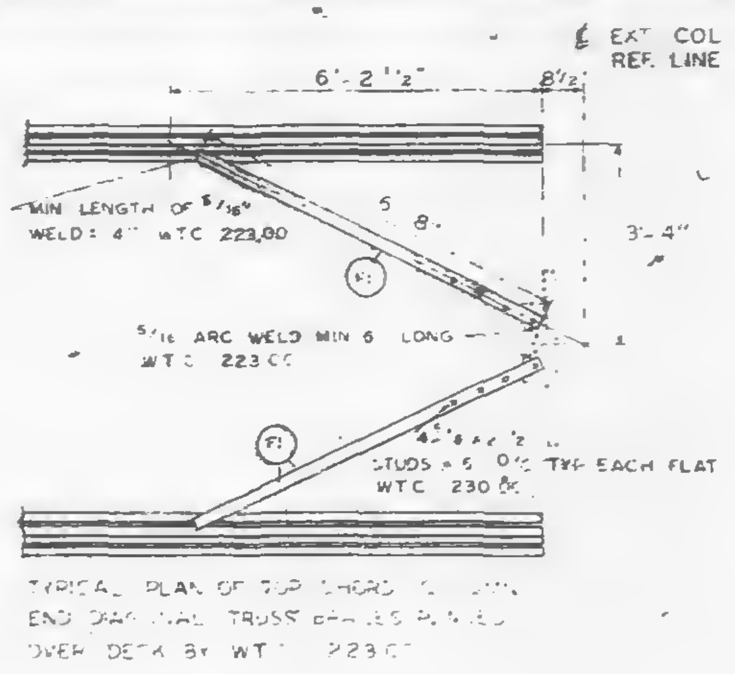
FABRICATION BY LACLEDE STEEL COMPANY

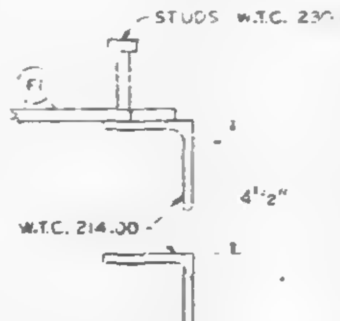
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-20	PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A.	DATE	DRAWN BY ______ DATE 1-30-69	
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE 1-30-69	
LACLEDE STEEL CO.		FABRICATION CONT NO. WTC 221	SHEET NO FP-K1

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

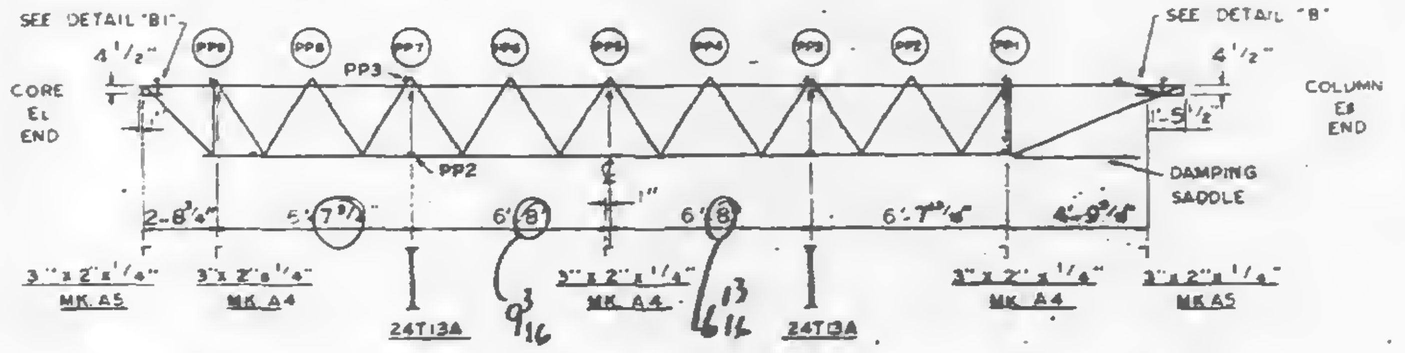

6'-2 1/2"
℄ EXT. COL REF. LINE
3'-4"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223.00
5/16 ARC WELD MIN 6" LONG W.T.C. 223.00
STUDS @ 5'-0" TYP. EACH FLAT W.T.C. 230.00
F1
TYPICAL PLAN OF TOP CHORD AT COLUMN END DIAGONAL TRUSS BRACES PLATES OVER DECK BY W.T.C. 223.00

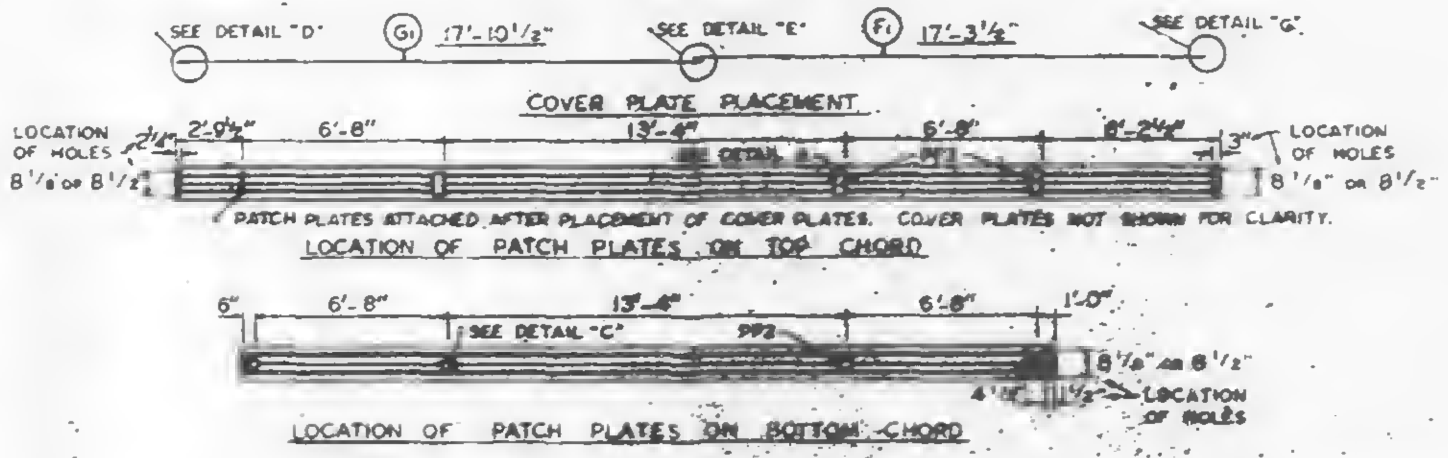


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	2T13A - 13' - 3"	ST213A
3"x2"x1/4" ANGLE	A4	3	3"x2"x1/4"x13'-3"	ST 403
	A5	4	3"x2"x1/4"x6'-4 13/16"	ST 409
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x 6'-8"	ST 402
PATCH PLATES	PP3	8	2"x1/4"x 0'-7"	ST 400
	PP2	8	3"x3/8"x 0'-3"	ST 400
COVER PLATES	G1	2	7"x 0135"x 17'-10 1/2"	ST 303
	F1	2	7"x 0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	2 1/2 x 1 1/2 x 1/4" x 6"	ST 400
# 8 SHEAR ANCHOR	SA1	6	# 8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	2	3 1/2 x 3 1/2" x 3/8" x 3' 6 7/8"	ST 298
CONNECTION BAR	CB1	2	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .30" x 0'-9"	ST 400
	P3	2	4 1/2" x .30" x 1'-0"	ST 400

PANEL NO. KR1 SIZE 13'-4" x 35'-8"

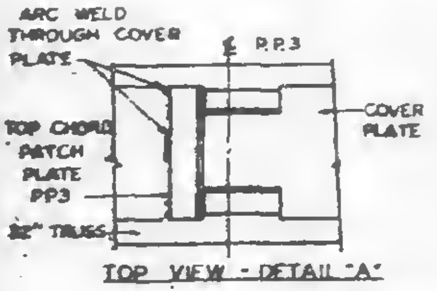




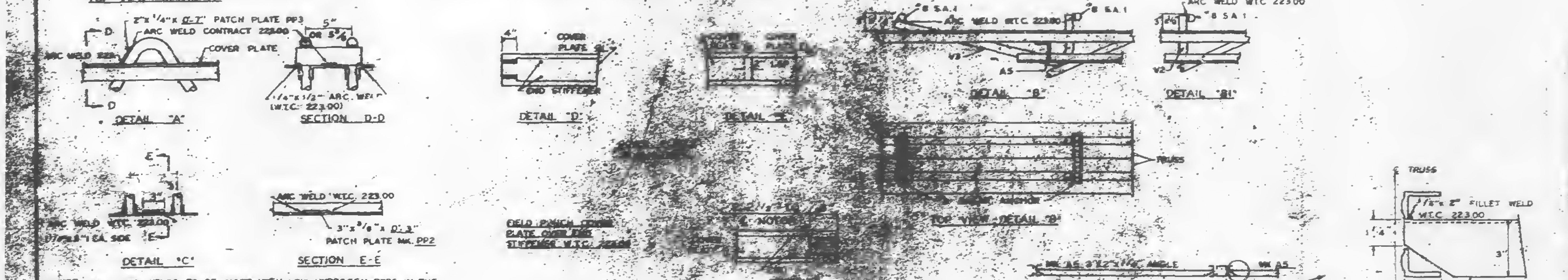
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"



NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REF. DRWG		
	7-A83-21	7-22-[illegible]
	7-A84-3 & 31	[illegible]
	7-A84-15 & 16	7-22-68
	7-A84-39-41	7-22-68
	SA-124	1-8-69
	7-A83-2	1-2-69
	7-A81-11 & 12	7-22-[illegible]
	7-A82-8	7-22-[illegible]
	7-A84-42	[illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

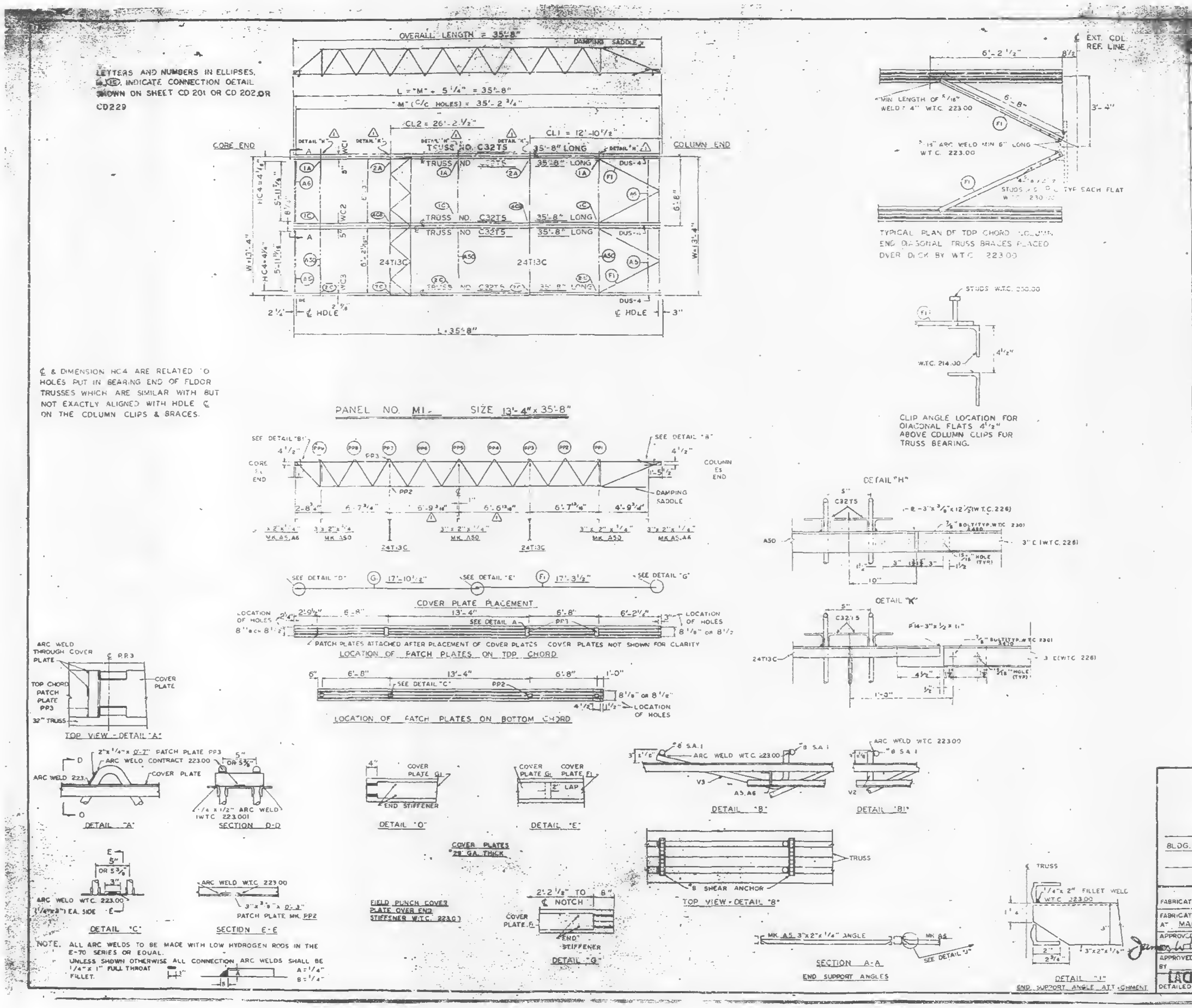
BLDG. A FLOORS 46-49 (EAST), 79-83 (WEST)
PANEL KR1 13'-4"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-21
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE 1-30-69
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. FOR FABRICATOR	DATE	CHECKED BY T.M. [illegible] DATE 1-30-69
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221

LETTERS AND NUMBERS IN ELLIPSES, (1E), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202 OR CD229

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.


OVERALL LENGTH = 35'-8"
DAMPING SADDLE
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
TRUSS NO. C32T5 35'-8" LONG
24T13C
DUS-4
W=13'-4"
℄ HOLE
L = 35'-8"
PANEL NO. M1 SIZE 13'-4" x 35'-8"
SEE DETAIL "B1"
SEE DETAIL "B"
CORE END
COLUMN END
DAMPING SADDLE
SEE DETAIL "D"
SEE DETAIL "E"
SEE DETAIL "G"
17'-10 1/2"
17'-3 1/2"
COVER PLATE PLACEMENT
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
COVER PLATES 24 GA. THICK
DETAIL "B"
DETAIL "B1"
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR
DETAIL "C"
SECTION E-E
ARC WELD W.T.C. 223.00
PATCH PLATE MK. PP2
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.01
DETAIL "G"
END STIFFENER
SECTION A-A
END SUPPORT ANGLES
MK. A5, 3"x2"x1/4" ANGLE
DETAIL "I"
END SUPPORT ANGLE ATTACHMENT
℄ EXT. COL. REF. LINE
6'-2 1/2"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "H"
DETAIL "K"

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED				
MATERIAL				
FLOOR TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2	[illegible]
3" x 2" x 1/4" ANGLE	A50	3	3"x2"x1/4"x14'-1 1/2"	ST 412
	A5	2	3"x2"x1/4"x6'-[illegible]"	ST 403
	A6	2	3"x2"x1/4"x6'-2"	ST 403
DIAGONAL FLATS	F1	4	4 1/2"x5/8"x8'-8"	ST 402
PATCH PLATES	PP3	12	2"x1/4"x0'-7"	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
COVER PLATES	G1	3	7"x.0135"x17'-10 1/2"	ST 303
	F1	3	7"x.0135"x17'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	2 1/2 x 1 1/2 x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST 298
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P3	2	4 1/2" x .30" x 1'-0"	ST 400
	P14	2	3" x 1/2" x 0'-11"	ST 409

NO.	DATE	REVISIO	BY
1	3-11-69	AS NOTED	G.D.C.

REF. DRWG	
7-AB3-22	7-22-68
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4 39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-65
7-AB1-11 & 12	7-22-68
7-AB2	7-22-68
7-AB4-2	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

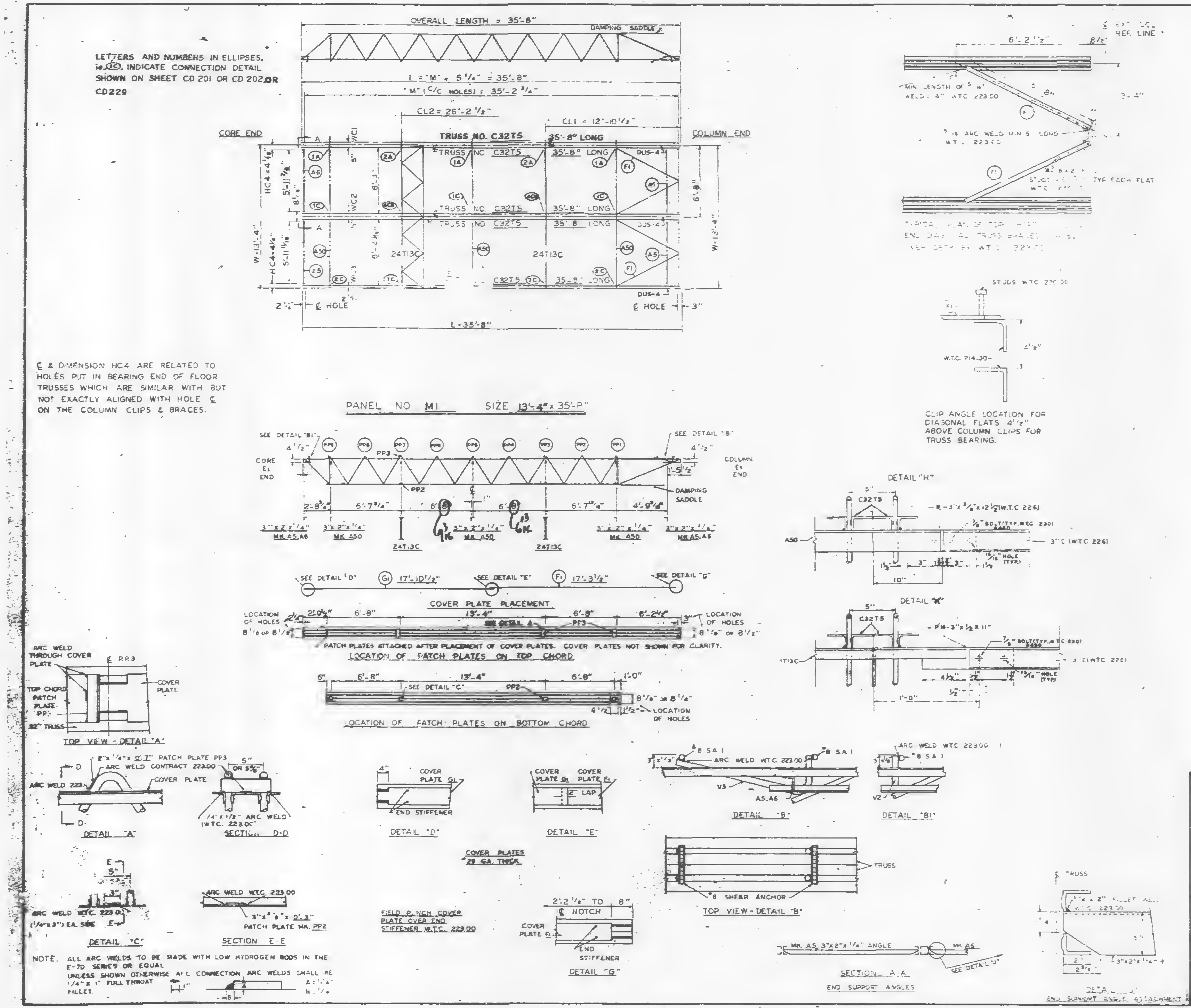
BLDG. A FLOORS 45-49 (WEST), 80-83 (EAST)
PANEL M1 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-22	PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 3/24/69	DRAWN BY [illegible] DATE 1-29-69	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE 1-29-69	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONC. NO. W.T.C. 221	SHEET NO. FP-M1

LETTERS AND NUMBERS IN ELLIPSES, ie.(1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202 OR CD229

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



OVERALL LENGTH = 35'-8"
DAMPING SADDLE
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C32T5 35'-8" LONG
DUS-4
24T13C
2 1/4" ℄ HOLE
℄ HOLE 3"
L = 35'-8"
PANEL NO M1 SIZE 13'-4" x 35'-8"
SEE DETAIL "B1"
SEE DETAIL "B"
PP3
PP2
2'-8 3/4"
5'-7 3/4"
6'-0
5'-7 13/16"
4'-9 3/8"
3" x 2" x 1/4" MK A5,A6
3" x 2" x 1/4" MK A50
SEE DETAIL "D"
G1 17'-10 1/2"
SEE DETAIL "E"
F1 17'-3 1/2"
SEE DETAIL "G"
COVER PLATE PLACEMENT
LOCATION OF HOLES 8 1/8" or 8 1/2"
* PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
DETAIL "B"
DETAIL "B1"
COVER PLATES 29 GA. THICK
TOP VIEW - DETAIL "B"
DETAIL "C"
SECTION E-E
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00
DETAIL "G"
SECTION A-A
END SUPPORT ANGLES
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
DETAIL "H"
DETAIL "K"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
TYPICAL PLAN OF TOP CHORD END DIAGONAL TRUSS BRACES

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1½	BT213C
3"x 2" x ¼" ANGLE	A50	3	3" x 2" x ¼" x 14'-1¼"	ST412
	A5	2	3" x 2" x ¼" x 6'-[illegible]	ST403
	A6	2	3" x 2" x ¼" x 8'-2"	ST403
DIAGONAL FLATS	F	4	1½" x ⅝" x 6'-8"	ST402
PATCH PLATES	PP3	12	2" x ¼" x 0'-7"	ST400
	PP2	12	3" x ⅜" x 0'-3"	ST403
COVER PLATES	G1	3	7" x 0.35" x 17'-10½"	ST303
	F1	3	7" x 0.35" x 17'-3½"	ST303
ANGLE CLIPS	C2	8	2" x 1½" x ¼" x 6"	ST400
⅝" SHEAR ANCHOR	SA	9	#5 REBAR x 1'-7"	ST400
DAMPING SADDLE	DUS-4	3	3" x 3" x ⅜" x 0'-6⅞"	ST298
[illegible] BAR	CB1	2	1" ¢ x 1'-3"	ST400
CONNECTION PLATES	P1	3	3½" x ⅜" x 0'-6½"	ST400
	P2	2	4½" x .39" x 0'-9"	ST400
	P3	2	4½" x .39" x 1'-0"	ST400
	P14	2	3" x ½" x 0'-11"	ST409

REF FLAG

7-AB3-22	7-22-68
7-AB4 3 & 3	1-3-68
7-AB4 . 5 & 16	7-22-68
7-AB4 . 39 . 41	7-22-68
SA-124	1-6-69
7-AB3 2	-3-68
7-AB1 11 & 12	7-22-68
7-AB2	7-22-68
7-AB4 42	10-15-68

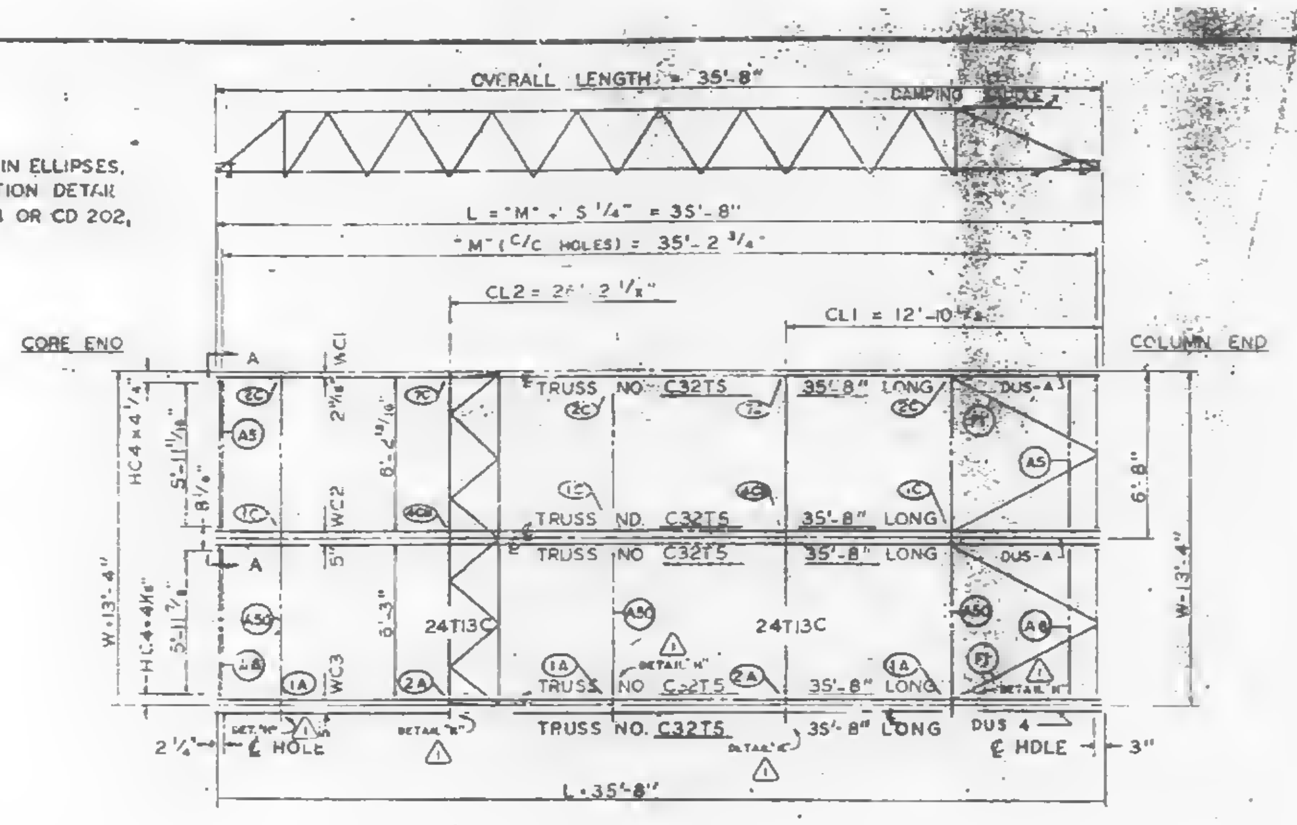
3140 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49 (WEST), 80-83 (EAST)
PANEL M1 - 13'-4" x 35'-8"

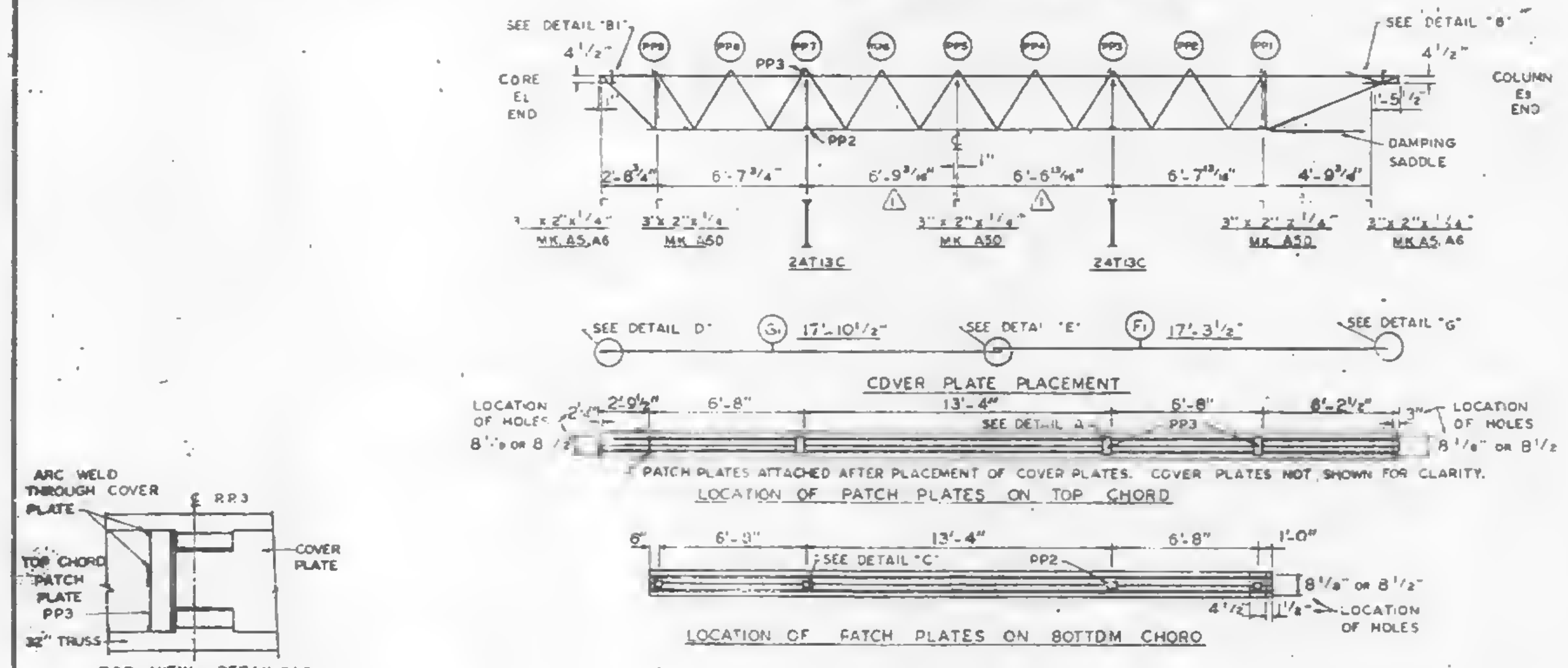
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-22 PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A. DATE
DRAWN BY DATE 1-29-69
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE 1-29-69
LACLEDE STEEL CO. A.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO. FP-M1

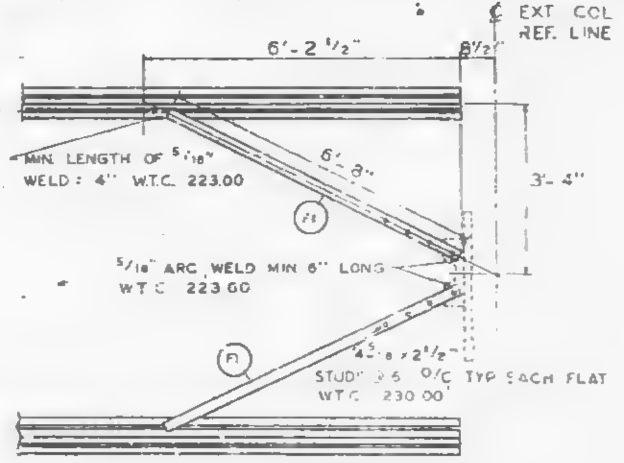
LETTERS AND NUMBERS IN ELLIPSES, E.G. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD 229



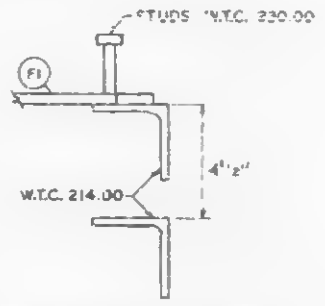
PANEL NO. MR1 SIZE 13'-4"x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

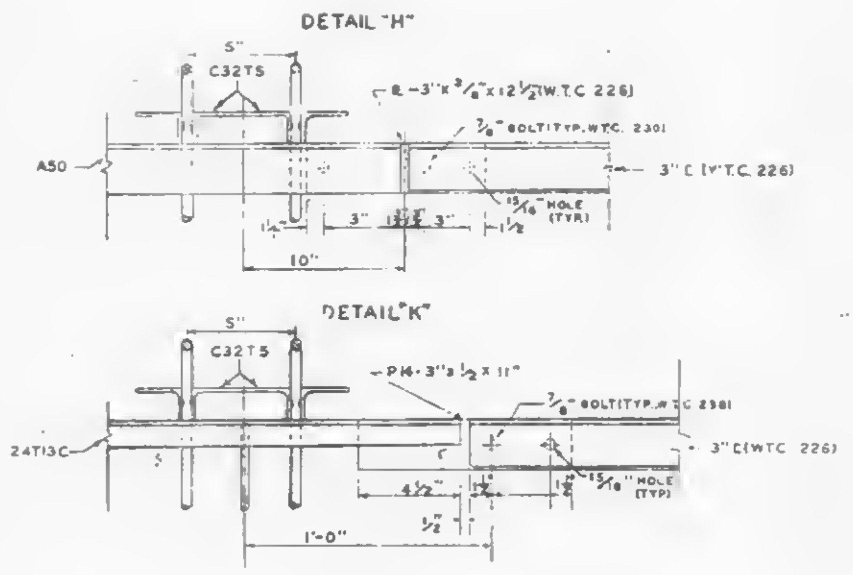



℄ EXT COL REF. LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223.00
6'-8"
3'-4"
5/16" ARC WELD MIN 6" LONG W.T.C. 223.00
STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230.00
F1

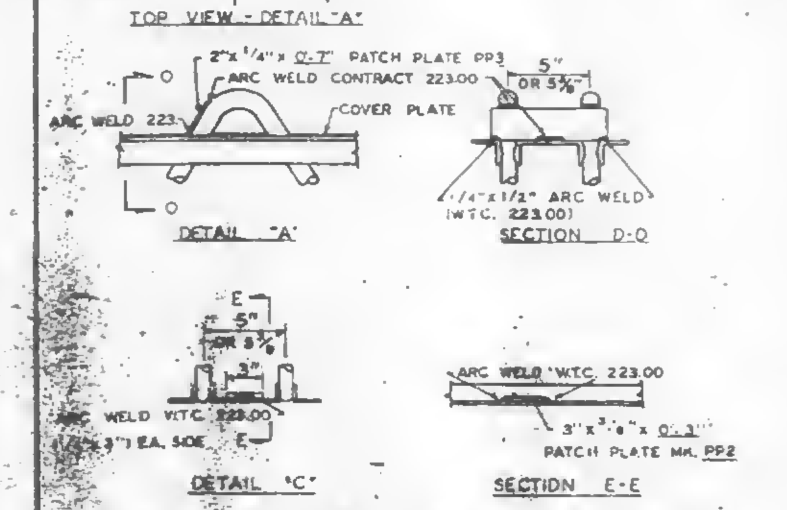
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

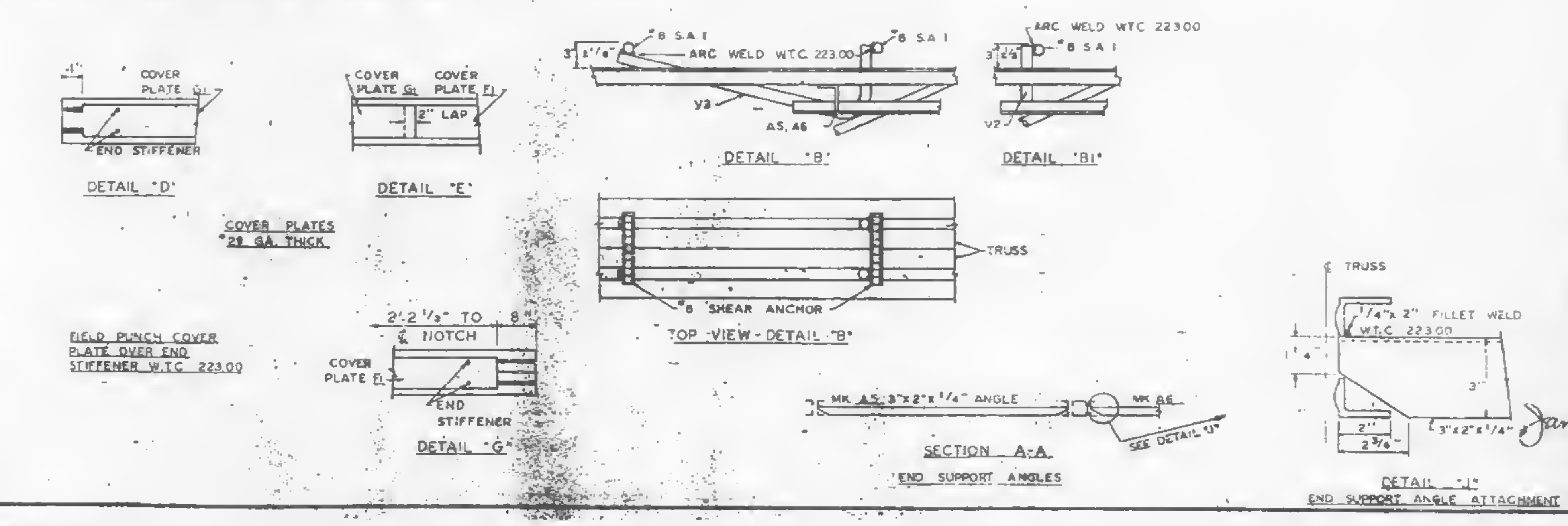


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	DETAIL
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2	BT213C
3"x 2"x 1/4" ANGLE	A50	3	3"x 2"x 1/4"x 14'-1 1/4	ST412
	A5	2	3"x 2"x 1/4"x 6'-4 13/16"	ST403
	A6	2	3"x 2"x 1/4"x 6'-2"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-9"	ST402
PATCH PLATES	PP3	12	2"x 1/4"x 0'-7"	ST400
	PP2	12	3"x 3/8"x 0'-3"	ST400
COVER PLATES	G1	3	7"x 0.35"x 17'-10 1/2"	ST302
	F1	3	7"x 0.35"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	8	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS-4	3	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST29R
CONNECTION BAR	CB1	2	1" Ø x 1'-3"	ST400
CONNECTION PLATES	P1	3	3 1/2"x 3/8"x 0'-6 1/2"	ST400
	P2	2	4 1/2"x .39"x 0'-9"	ST400
	P3	2	4 1/2"x .39"x 1'-0"	ST400
	P14	2	3"x 1/2"x 0'-11"	ST409





NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 3" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

NO.	DATE	REVISION	
1	3-11-69	AS NOTED	G.D.C.

REF. DWG

7-AB3-23	7-22-68
7-AB4-3 & 31	1-3-68
7-AB4-5 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3	1-3-68
7-AB1 & 12	7-22-68
7-AB2	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

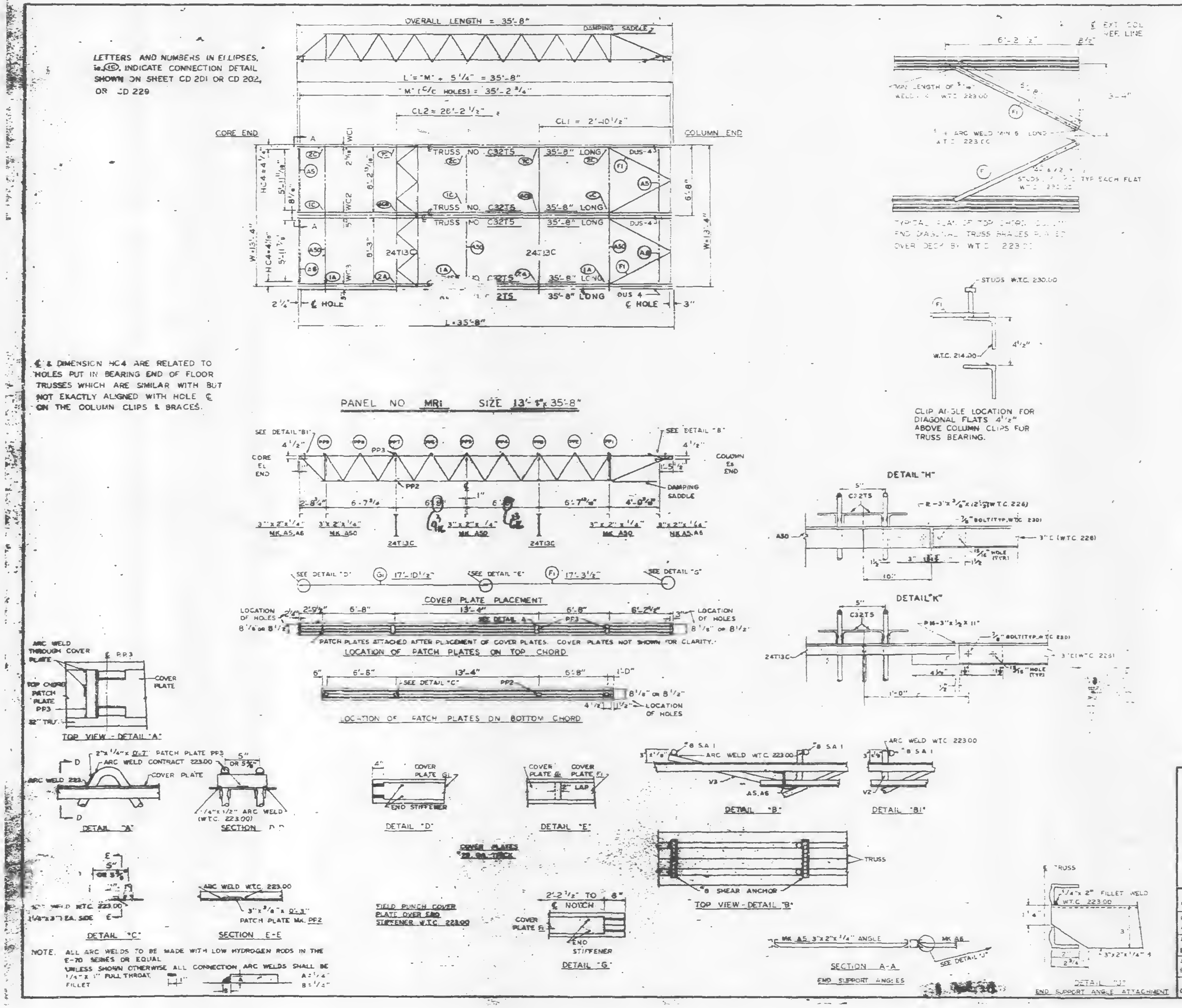
BLDG A FLOORS 46-49(EAST), 79-83(WEST)
PANEL MR1 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-23	PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 3/24/69	DRAWN BY R.A. DATE 1-29-69	
APPROVED FOR FABRICATION BY FOR FABRICATOR LACLEDE STEEL CO.	DATE	CHECKED BY T.M. CHURA DATE 1-29-69	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-MR1

LETTERS AND NUMBERS IN ELLIPSES, ie.(1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD 229

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2	BT213C
3"x2"x1/4" ANGLE	A50	3	3"x2"x1/4"x14'-1 1/4"	ST412
	A5	2	3"x2"x1/4"x 6'-1 13/16"	ST403
	A6	2	3"x2"x1/4"x 6'-2"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
PATCH PLATES	PP3	12	2"x 1/4"x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x 0.135"x 17'-10 1/2"	ST 303
	F1	3	7"x 0.135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	2 1/2 x 1 1/2 x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	2	1" ɸ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P3	2	4 1/2" x .39" x 1'-0"	ST 400
	P4	2	3" x 1/2" x 0'-11"	ST 400

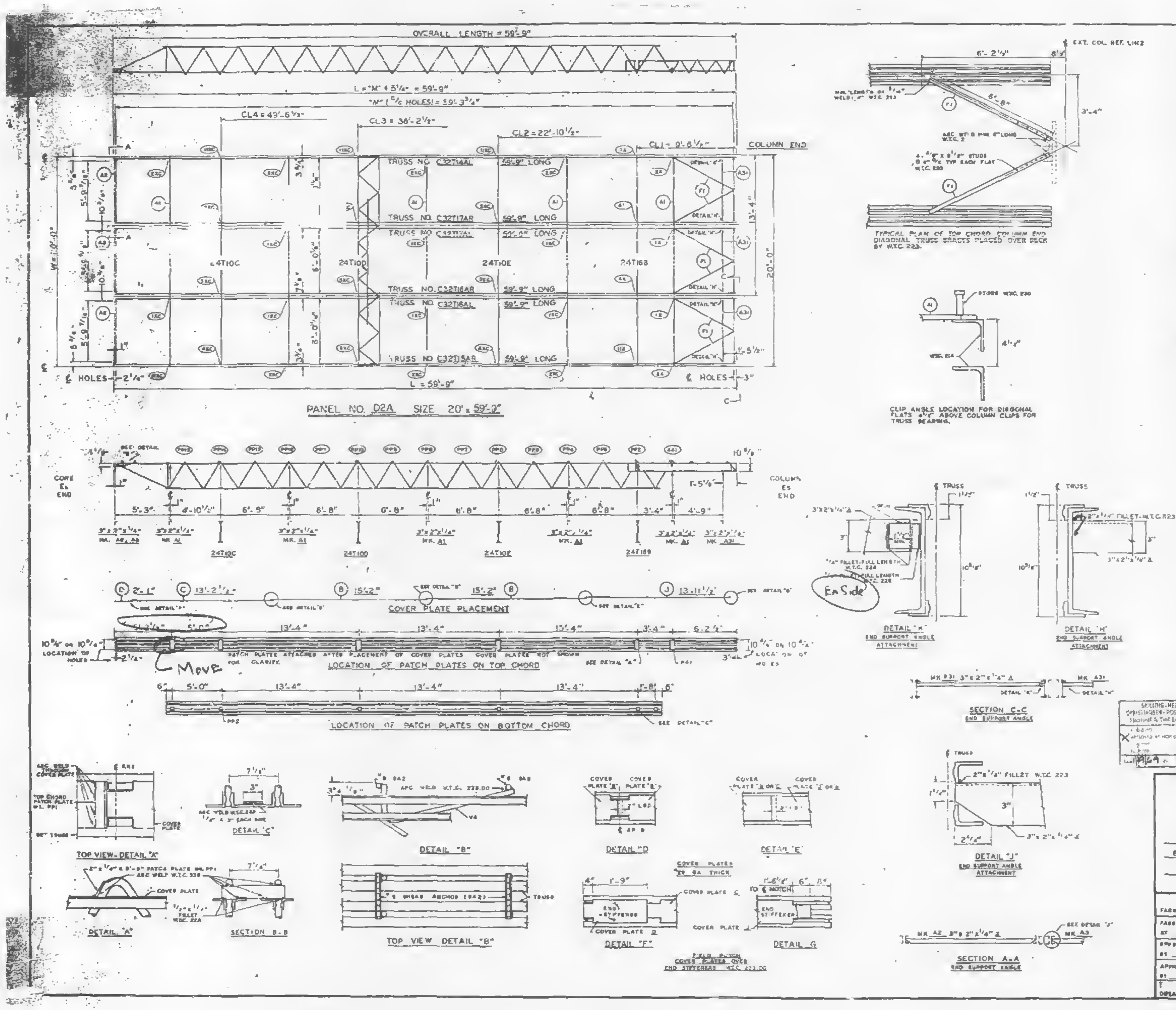
REF DRWG		
	7-A83-23	7-22-68
	7-A84-3 & 3	1-3-68
	7-A84-15 & 6	7-22-68
	7-A84-39-41	7-22-68
	SA-124	1-6-69
	7-A83-2	1-3-68
	7-A81-11 & 12	7-22-68
	7-A82	7-22-68
	7-A84-42	10-15-68

3/4/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 46-49(EAST), 79-83(WEST)
PANEL MR1 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY	
FABRICATED AT MADISON, ILLINIOIS	DESIGN DRAWING NO 7-A83-23 PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A. DATE	DRAWN BY R.B. DATE 1-29-69
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR DATE	CHECKED BY T.M. CHURA DATE 1-29-69
DETAILED BY A. C. WEBER	FABRICATION CONT NO W.T.C. 221
	SHEET NO. FP-MR1


OVERALL LENGTH = 59'-9"
L = "M" + 5 1/4" = 59'-9"
"M" (C/C HOLES) = 59'-3 3/4"
CL4 = 43'-6 1/2"
CL3 = 38'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14AL 59'-9" LONG
TRUSS NO. C32T17AR 59'-9" LONG
TRUSS NO. C32T17AL 59'-9" LONG
TRUSS NO. C32T16AR 59'-9" LONG
TRUSS NO. C32T16AL 59'-9" LONG
TRUSS NO. C32T15AR 59'-9" LONG
24T10C
24T10D
24T10E
24T168
20'-0"
℄ HOLES
L = 59'-9"
PANEL NO. D2A SIZE 20' x 59'-9"
CORE END
COLUMN END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES FOR CLARITY
LOCATION OF PATCH PLATES ON BOTTOM CHORD
Ea Side
Move
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW - DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL G

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14AL	1	C32T14AL x 59'-9"	ST 214AL
	T15AR	1	C32T15AR x 59'-9"	ST 215AL
	[illegible]	1	[illegible]	ST 216AL
	[illegible]	1	[illegible]	
	[illegible]	1	[illegible]	ST 217AL
	[illegible]	1	[illegible]	
BRIDGING TRUSSES	T10C	1	24T10C x 19'-11"	ST 210C
	T10D	1	24T10D x 19'-11"	ST 210D
	T10E	1	24T10E x 19'-11"	ST 2102
	T168	1	24T168 x 19'-11"	ST 2189
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-11 5/16"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
	A31	3	3" x 2" x 1/4" x 5'-6 1/8"	ST 410
CLOSURE PLATES	[illegible]	3	[illegible]	[illegible]
DIAGONAL FLATS	F1	6	[illegible]	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	24	2" x 1 1/2" x .25" x 6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	34	1" ø x 1'-3"	ST 400
	CB4	9	1" ø x 0'-10"	ST 400
	CB	1	1" ø x 1'-7	
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-8 1/8"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-6"	ST 400
	P8	1	4 1/2" x .39" x 0'-8"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (18).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

A x 1/4"
B x 1/4"

NO.	DATE	REVISION	BY

SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
X
SK

REF. DRWG.

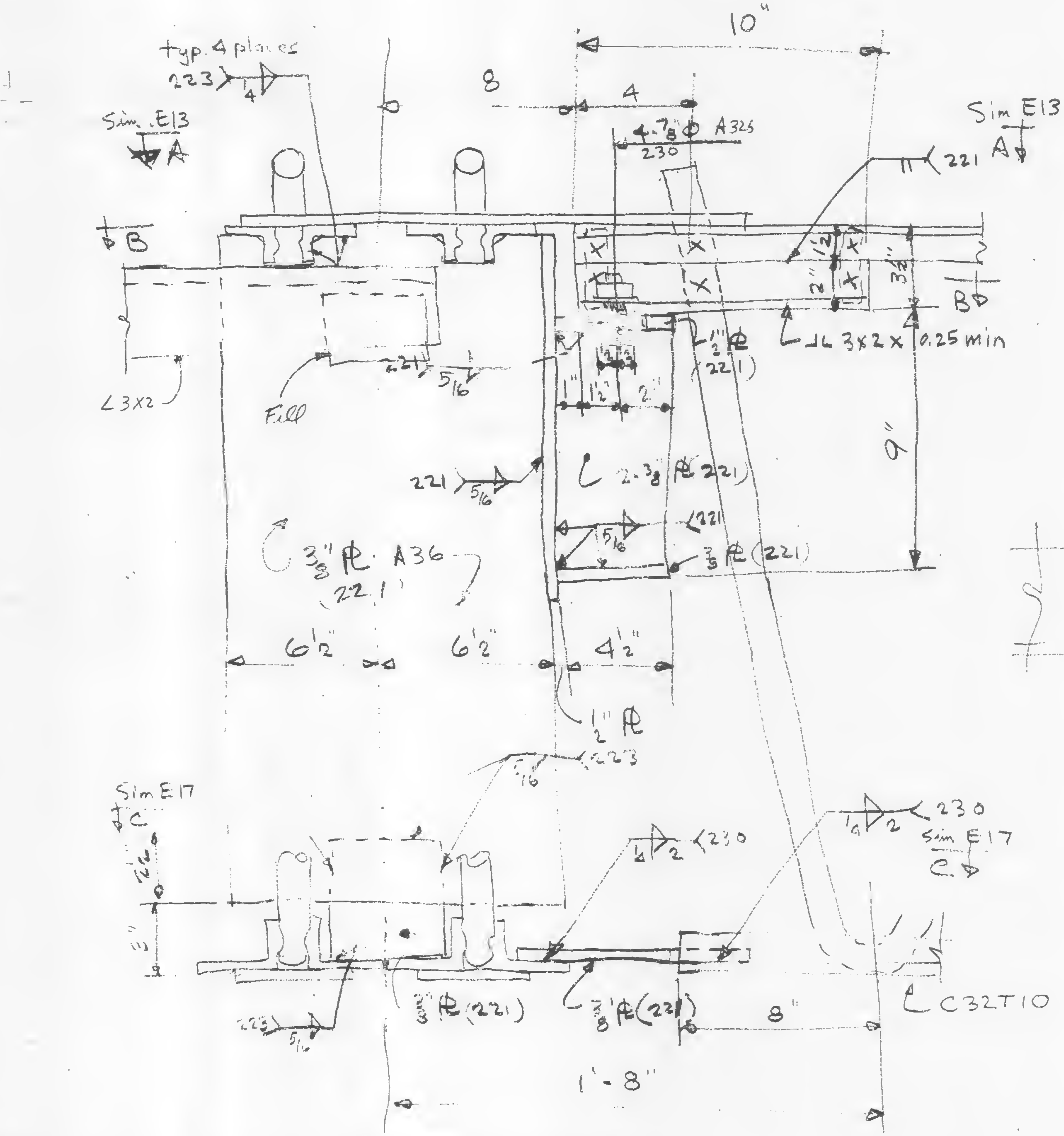
7-A83-30	10-4-68
7-A84-28	7-22-68
7-A81-13	10-4-68
7-A81-14, 15 & 18	10-4-68
7-A82-13	10-4-68
7-A82-17	10-4-68
3A-12A	10-11-62

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

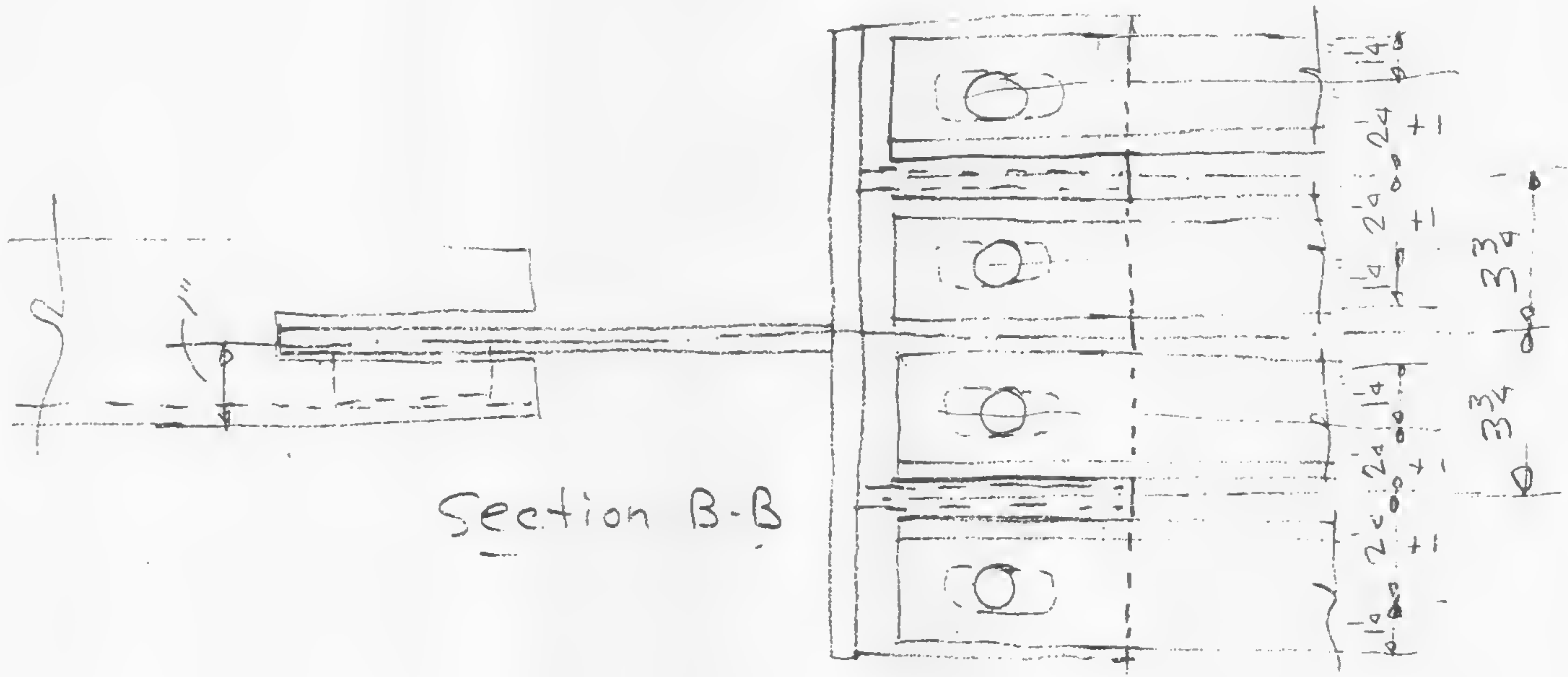
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL D2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-30 PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE
DRAWN BY LR DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY F.M. Chura DATE DEC. 5, 1968
IN CHARGE OF PROD. C. L.
DETAILED BY A.T. STEELE
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP D2A



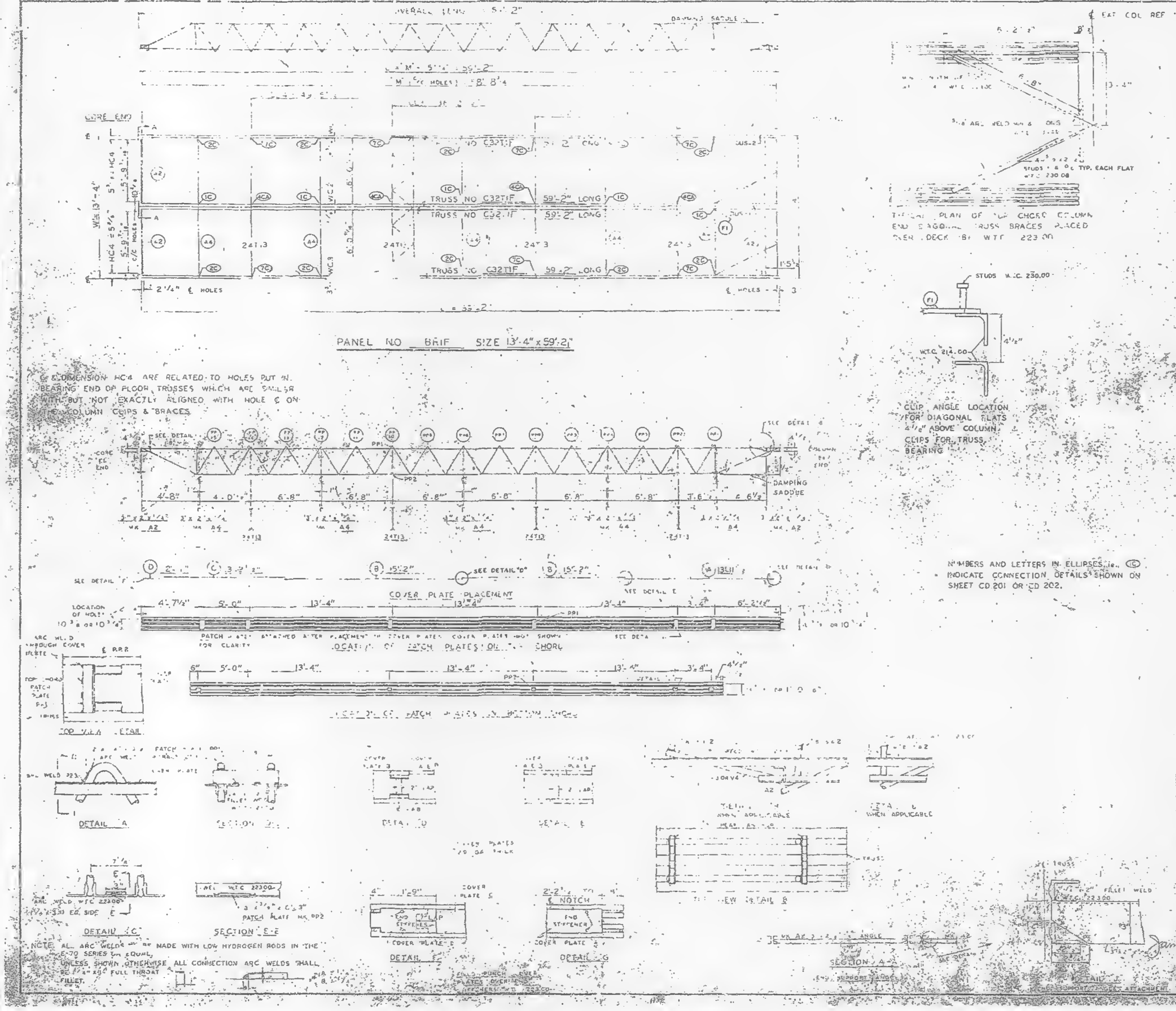
DETAIL E18



Section B-B

SHCR

WTC1-131-LERA


OVERALL LENGTH 59'-2"
DAMPING SADDLE
CORE END
TRUSS NO C32T1F 59'-2" LONG
2'-1/4" ℄ HOLES
PANEL NO BRIF SIZE 13'-4" x 59'-2"
SEE DETAIL
DAMPING SADDLE
4'-8"
4'-0"
6'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
TOP VIEW DETAIL
DETAIL A
DETAIL C
SECTION E-E
PATCH PLATE MK PP2
ARC WELD WTC 22300
DETAIL F
DETAIL G
NOTCH
COVER PLATE
SECTION A-A
WHEN APPLICABLE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00
STUDS • 6" O.C. TYP. EACH FLAT WTC 230.08
STUDS W.T.C. 230.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING
℄ EXT COL REF LINE

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1 1/2" FULL THROAT FILLET.

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T-F	4	C32T1F - 59'-2"	ST201F
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3" x 2" x 1/4 ANGLE	A2	4	3" x 2" x 1/4" x 5'-11"	ST403
	A4	5	3 x 2" x 1/4 x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST403
PATCH PLATES	PP1	12	2 x 1/4" x 0'-9"	ST400
	PP2	12	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .035" x 13'-2 1/2"	ST303
	D	2	9" x .035" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST299
CONNECTION BAR	CB1	4	1" # x 1'-3"	ST400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-9"	ST400
	P2	4	4 1/2" x .30" x 0'-0"	ST400
	P3	4	4 1/2" x .30" x 4'-0"	ST400

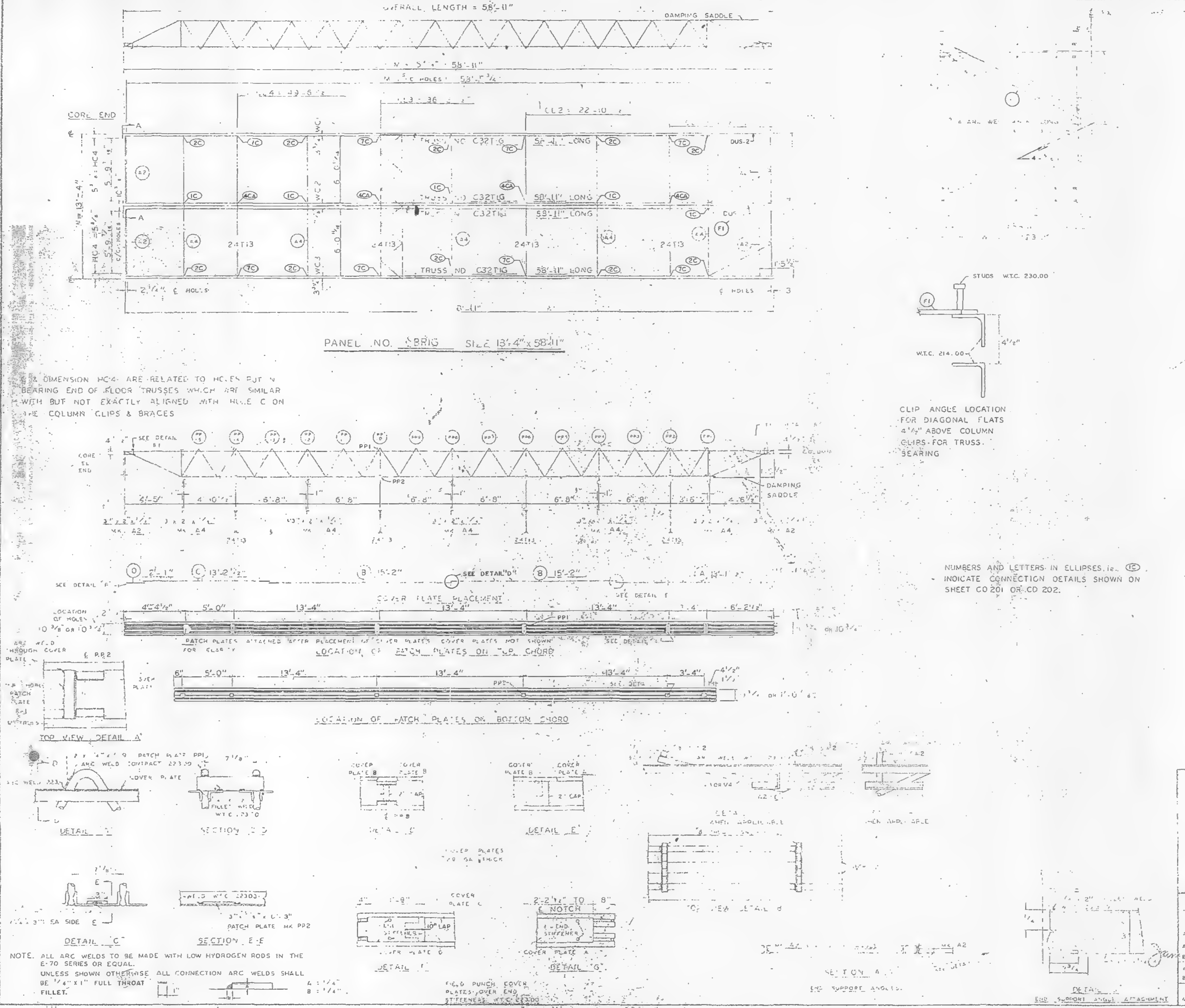
NO.	DATE	REVISION	BY

REF DRWG	
7-AB4-3,3.1	1-3-68
7-AB4-15-16 & 39	7-22-68
7-AB4-42	10-15-68
SA-24	10-11-68
7-AB3-4	1-3-68
7-AB1-2	7-22-68
7-AB2-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 47-48, 70-71(N) + 47-48(S)
PANEL BRIF - 13'-4" x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY	
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAW NO. 7-AB2-5 7-22-68 PLATE
APPROVED FOR FABRICATION James W. ... FOR P.O.N.Y.A. DATE 11/1/68	DRAWN BY [illegible] DATE 10-22-68
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE	CHECKED BY H M CHURA DATE 10-22-68
DETAILED BY [illegible]	FABRICATION CONT. NO. W.T.C. 221
	SHEET NO. FP BRIF


OVERALL LENGTH = 58'-11"
DAMPING SADDLE
CORE END
TRUSS NO C32T1G 58'-11" LONG
24T13
DUS-2
F1
PANEL NO. CBRIG SIZE 13'-4" x 58'-11"
CORE EL END
SEE DETAIL B1
PP1
PP2
DAMPING SADDLE
SEE DETAIL "D"
SEE DETAIL E
COVER PLATE PLACEMENT
PATCH PLATES ATTACHED BEFORE PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL A
DETAIL B
SECTION D-D
DETAIL D
DETAIL E
DETAIL C
SECTION E-E
3" x 3/8" x 0'-3" PATCH PLATE MK PP2
DETAIL F
DETAIL G
NOTCH
END STIFFENER
COVER PLATE A
COVER PLATE C
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
SECTION A-A
END SUPPORT ANGLES
DETAIL
END SUPPORT ANGLE ATTACHMENT
STUDS W.T.C. 230.00
W.T.C. 214.00
4 1/2"

C & DIMENSION HC-4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e. ⓒ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

[illegible] MATERIAL PER PANEL				REF DRWG
[illegible]	MARKS	[illegible]	SIZE	
	[illegible]	4	C32T1G 58'-11"	ST 201G
		4		
	[illegible]	4	24T13 [illegible]	ST 213
	[illegible]		[illegible]	ST 403
	[illegible]	5	[illegible] 3	ST 403
			[illegible]	ST 402
PATCH PLATES	PP1	12	[illegible]	ST 400
	PP2	12	3 x 3/8 x 1 3"	ST 400
		2	[illegible] 2	ST 303
[illegible]	B	4	9 x .0135 x 15'-2"	ST 303
	C	2	9 x .0135" x 13'-2 1/4"	ST 303
	D	2	5 x .0135" x 2'-1"	ST 303
[illegible]	[illegible]	16	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
[illegible]	SA2	6	#6 REBAR x 0'-5"	ST 400
[illegible]	DUS-1	1	[illegible] 6 7/8"	ST 298
	DUS-2	1	2 1/2 x 3 x 3/8 x 3'-6 7/8"	ST 298
[illegible] BAR	C91	4	1" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
⚠	7-15-68	GENERAL	TMC

A-94 1,3,1 & 30 [illegible] 2-68
A-94 15 & 16 5-6-68
A-94 42 4-1-68
[illegible] 3-20-67
A-93 2 [illegible] 3-68
[illegible] 2 2-5-68
A-94 9 [illegible] 15-68

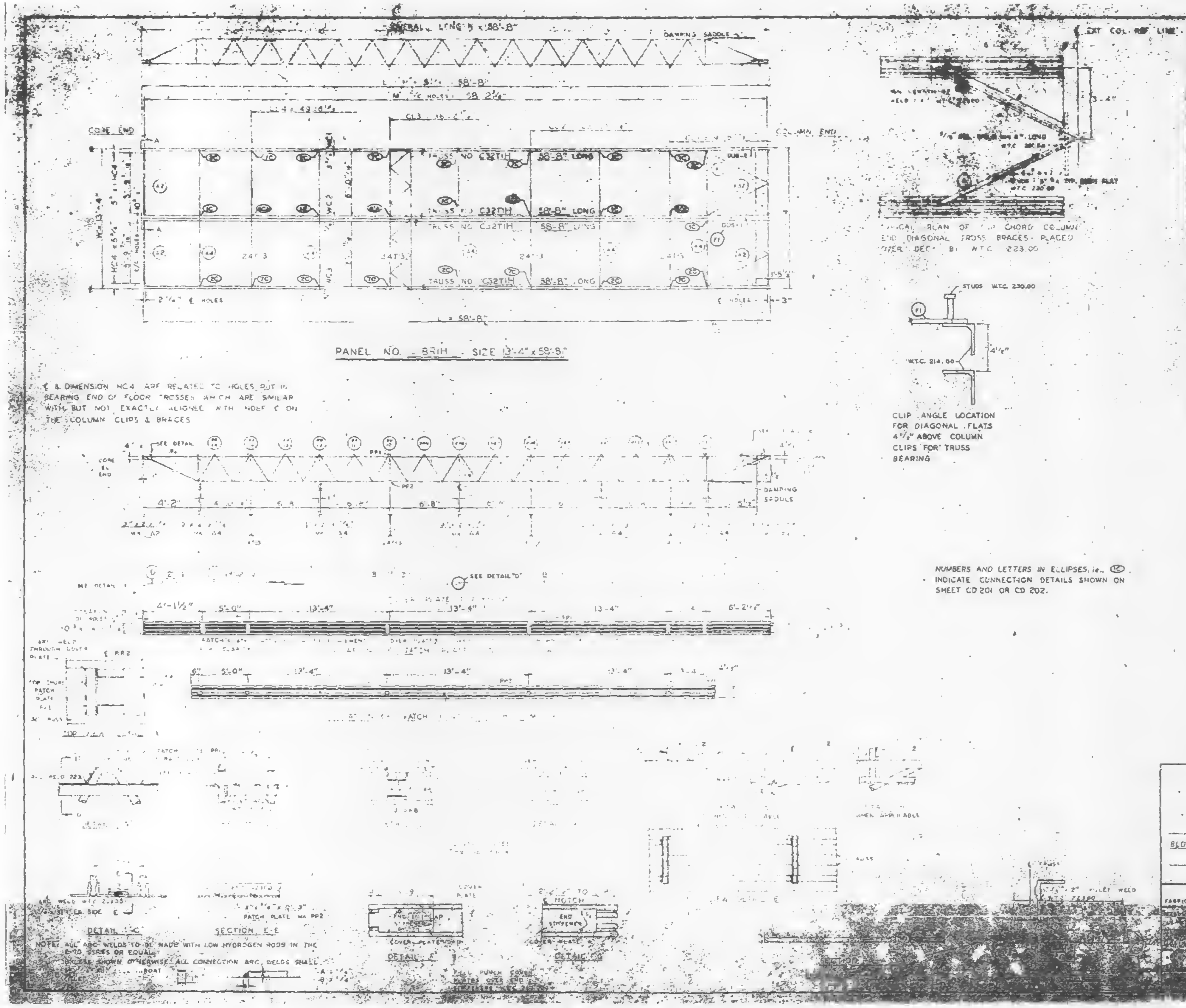
NEW [illegible] AUTHORITY

[illegible] 10-11, 35 [illegible] 39, 40 [illegible]

PANEL BRIG 13'-4" x 58'-11"

LACLEDE STEEL COMPANY
AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 8/16/68	DESIGN DRAWING NO 7 [illegible] 6 4-1-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	DRAWN BY [illegible] DATE FEB 24, 1968	
LACLEDE STEEL CO.		CHECKED BY J.S. PAUL DATE FEB 24, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A. L. WEBER		FABRICATION CONT NO WT. 221	SHEET NO FP BRIG



PANEL NO. 8R1H . SIZE 13'-4" x 58'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED AFTER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4½" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING

NUMBERS AND LETTERS IN ELLIPSES, ie. ⑫ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL [illegible]

[illegible]				
FLOOR TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING TRUSSES	T1E	4	24T1 [illegible]	[illegible]
3"x2"x¼" ANGLE	A3	4	[illegible]	[illegible]
	A4	8	[illegible]	[illegible]
DIAGONAL FLATS	F1	4	[illegible]	[illegible]
PATCH PLATES	PP1	12	[illegible]	[illegible]
	PP2	12	[illegible]	ST 400
COVER PLATES	A	2	9" x .0135" x 13'-11½"	ST 303
	B	4	9" x .0135" x 15'-2"	ST 303
	C	2	9" x .0135" x 13'-2½"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	16	2" x 1½" x ¼" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST 290
	DUS-2	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST 290
CONNECTION BAR	CB1	4	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	[illegible]	ST 400
	P2	4	4½" x .30" x 0'-9"	ST 400
	P3	4	4½" x .30" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

REF DRWG	
7-484-33.1	3-68
7-484-19,38&39	7-22-68
7-484-42	10-15-68
SA-74	10-11-68
7-493-2	3-68
7-461-2	7-22-68
7-482-8	7-22-68

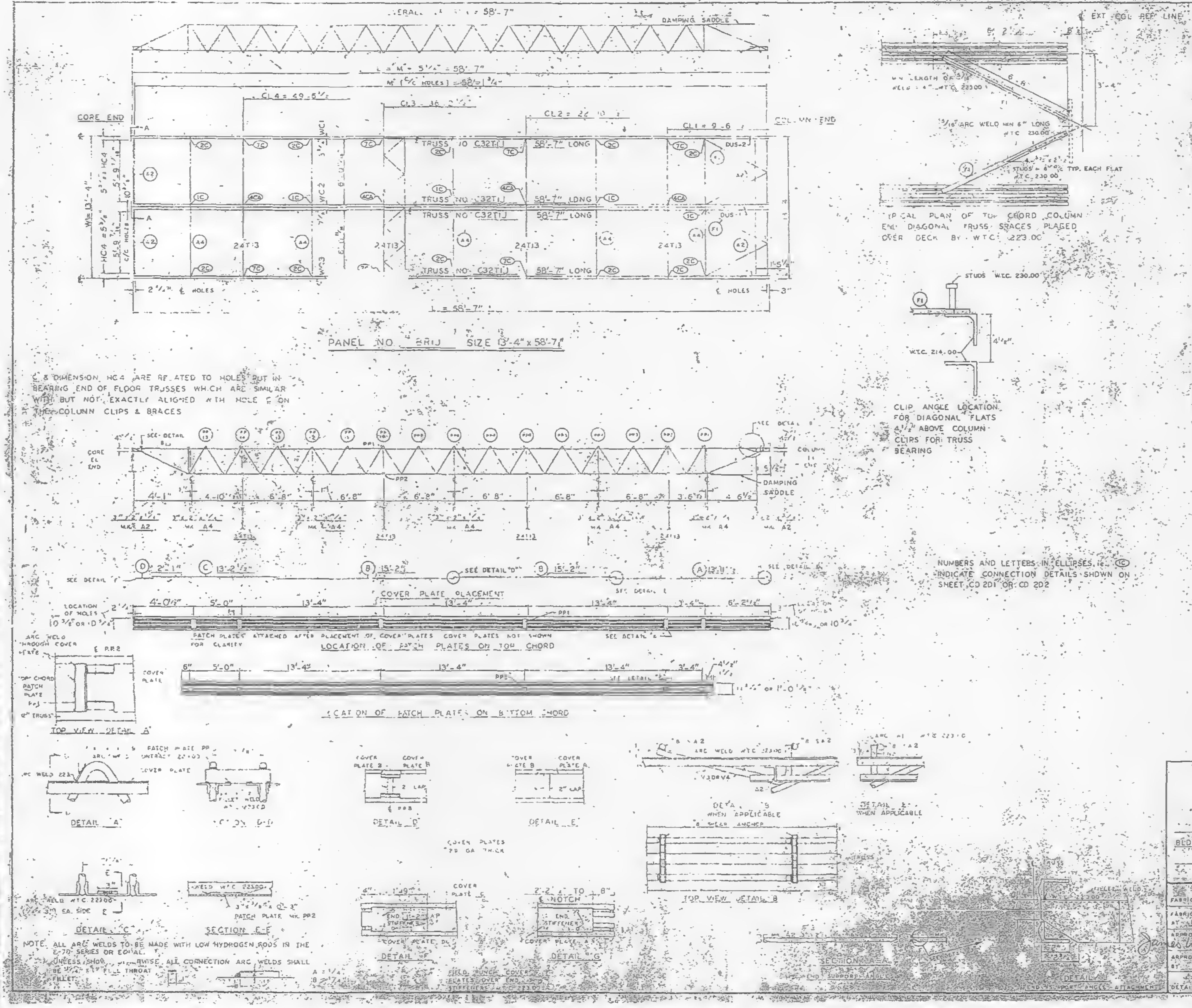
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 4 FLOORS 79-80(N)

PANEL 8R1H · 13'-4" x 58'-8"

FABRICATION BY LACLEDE STEEL COMPANY

7-22-68
10-22-68
10-22-68



℄ & DIMENSION HC4 ARE RELATED TO HOLES BUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, I.E. (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1J	4	C32T1J - 58'-7"	ST201J
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3" x 2" x ¼" ANGLE	A2	4	3" x 2" x ¼" x 5'-11 9/16"	ST403
	A4	5	3" x 2" x ¼ x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1½" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP1	12	2" x ¼" x 0'-9"	ST400
	PP2	12	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	2	9" x .0135" x 13'-11½"	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2½"	ST303
	D	2	9" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1½" x ¼" x 0'-6"	ST400
#8 SHEAR ANCHOR	SA2	5	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-1	1	3½" x 3½" x 3/8" x 3'-8 ¼"	ST298
	DUS-2	1	3½" x 3½" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST400
CONNECTION PLATES	P1	5	3½" x 3/8" x 1'-6½"	ST400
	P2	4	4½" x .30" x 0'-9"	ST400
	P3	4	4½" x .30" x 1'-0"	ST400

NO.	DATE	REVISION	BY

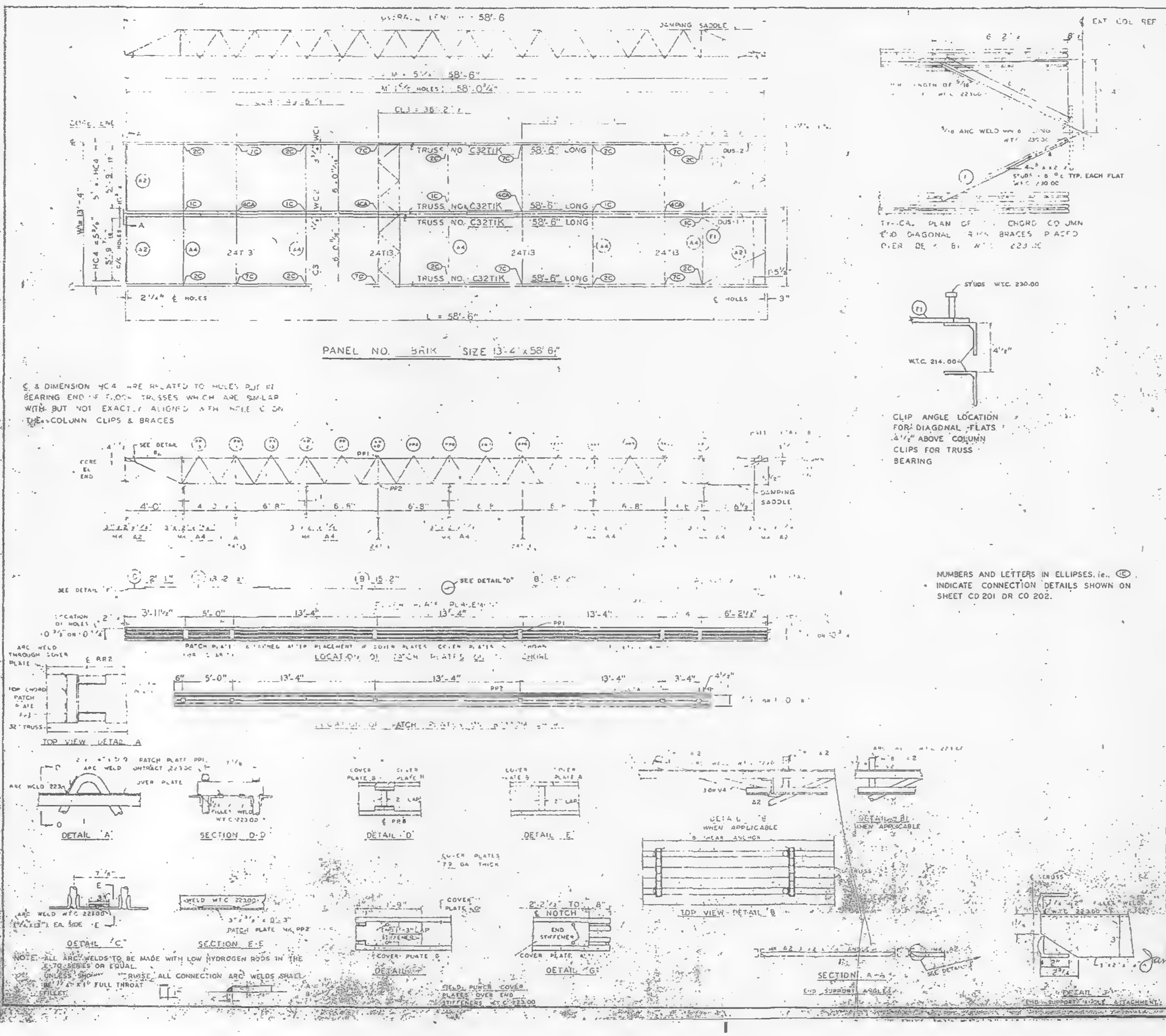
REF DRWG

7-AB4 3,3,1	1-3-68
7-AB4 -15,16 & 33	7-22-68
7-AB4 42	10-15-68
SA 124	10-11-68
7-AB3-2	1-3-68
7-AB1-2	7-22-68
7-AB2-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 40(N)
PANEL 8R1J - 3'-4" x 58'-7"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-6 7-22-68 PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A. DATE 11/1/68
DRAWN BY [illegible] DATE 10-22-68
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE 10-22-68
IN CHARGE OF PROD.
DETAILED BY [illegible]
FABRICATION CONT. NO W.T.C. 221
SHEET NO FD 4F1



€ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DETAIL B WTC 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, ie., ⓒ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1K	4	C32T1K - 58'-6"	ST201K
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3 x 2 x 1/4 ANGLE	A2	4	3" x 2" x 1/4" x 5'-11 9/16"	ST403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP1	12	2 x 1/4" x 0'-9"	ST400
	PP2	12	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST303
	B	4	9" x .0135" x 16'-2"	ST303
	C	2	9" x .035" x 13'-2 1/2"	ST303
	D	2	9" x .035" x 2'-1"	ST303
ANGLE, CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 1/2" x 1'-3"	ST400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST400
	P2	4	4 1/2" x .39" x 0'-9"	ST400
	P3	4	4 1/2" x .39" x 1'-0"	ST400

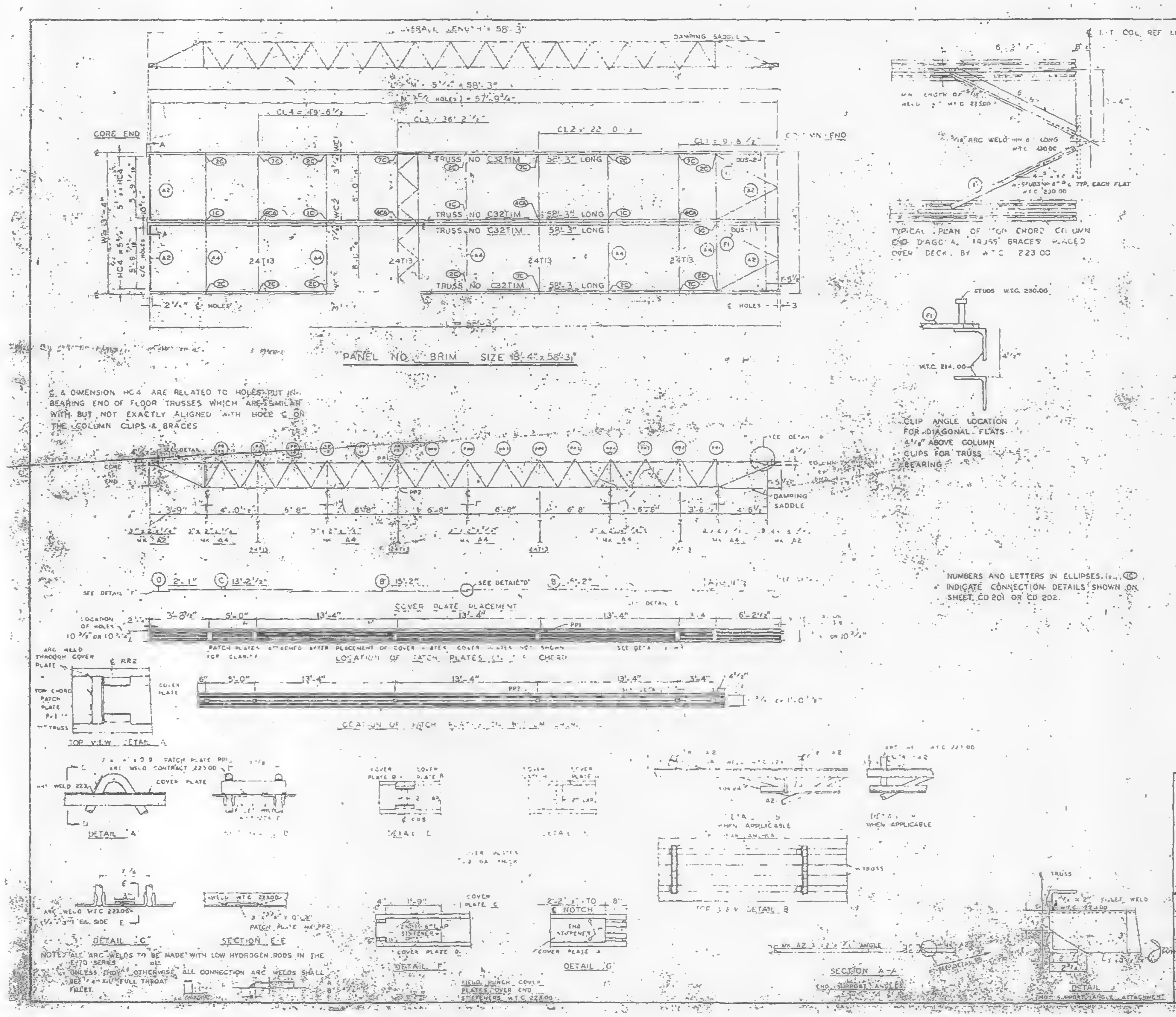
NO.	DATE	REVISION	BY

REF DRWG	
7 AB4 3.3.1	1-3-68
7 AB4-15,16 & 39	7-22-68
7 AB4-42	10-15-68
SA 24	10-11-68
7 AB3 2	1-3-68
7 AB1-2	7-22-68
7 AB2-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46(N) + 45-46(S)
PANEL 9B1K - 13'-4" x 58'-6"

FABRICATION BY: LACLEDE STEEL COMPANY	
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-67 7-22-68
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A. DATE 11/1/68	DRAWN BY DATE 10-22-68
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE	CHECKED BY M CHURA DATE 10-22-68
DETAILED BY A.C. WEBER	FABRICATION CONT. NO. W.T.C. 221
	SHEET NO. FD-9B1K



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK. BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES. i.e. ⓘC INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES

UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIM	4	C32TIM - 58'-3"	ST201M
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3" x 2" x 1/4" ANGLE	A2	4	3" x 2" x 1/4" x 5'-11 9/16"	ST403
	A4	5	3" x 2" x 1/4 x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8-REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" x 1" x 3'-2"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	[illegible]	4 1/2" x .239" x 0'-9"	ST 400
	P3	4	4 1/2" x .239" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

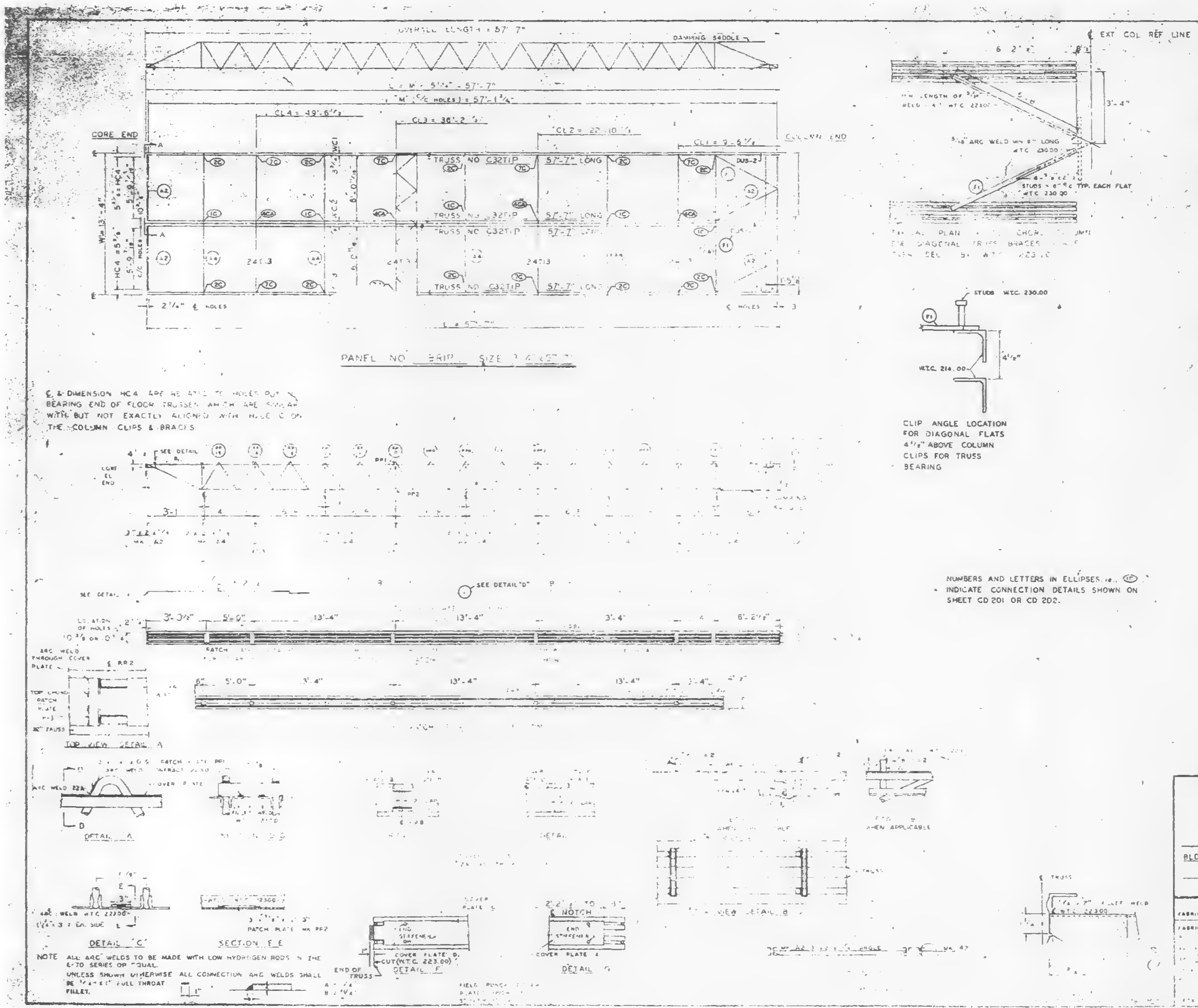
REF DRWG
7 AB4 3.3. 1-3-68
7-AB4-15,16&29 7-22-68
7 AB4 42 10-15-68
S/ 14 10-11-68
7-AB3-2 1-3-68
7-AB1-2 7-22-68
7 AB2 6 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73(N)

PANEL 9RIM - 13'-4" x 58'-3"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-5 7-22-68	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 11/1/68	DRAWN BY [illegible] DATE 10-22-68	
APPROVED FOR FABRICATION BY J [illegible] FOR FABRICATOR	DATE	CHECKED BY TJ CHURA DATE 10-22-68	IN CHARGE OF [illegible]
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. F9 9RI



℄ & DIMENSION HC4 ARE RELATED TO HOLES OUT BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" × 1" FULL THROAT FILLET.

REQUIRED MATERIAL

MATERIAL	MK	PCS	[illegible]	[illegible]
FLOOR TRUSSES	T1P	4	[illegible]	[illegible]
BRIDGING TRUSSES	T13	4	24T13 [illegible]	[illegible]
3"×2"×1/4" ANGLE	A2	4	3"×2"×1/4"×5'-11 1/16	[illegible]
	A4	5	3"×2"×1/4"×13'-3	[illegible]
DIAGONAL FLATS	F1	4	[illegible]	[illegible]
PATCH PLATES	PP1	12	2"×1/4"×0'-0"	ST 400
	PP2	12	3"×1/4"×0'-3"	ST 400
COVER PLATES	A	2	9"×.0135"×13'-11 1/4	ST 303
	B	4	9"×.0135"×13'-2 1/2	ST 303
	C	2	9"×.0135"×13'-2 1/2	ST 303
ANGLE CLIPS	CL	16	2"×1 1/2"×1/4"×0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR × 0'-8"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"×3 1/2"×3/8"×3'-6 1/8"	[illegible]
	DUS-2	1	3 1/2"×3 1/2"×3/8"×5'-6 7/8"	STEEL
CONNECTION BAR	CB1	4	1"ϕ × 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" × 3/4" × 6 1/2"	ST 400
	P2	4	4 1/2" × .06" × 0'-8"	ST 400
	P3	4	4 1/2" × .30" × 1'-0"	ST 400

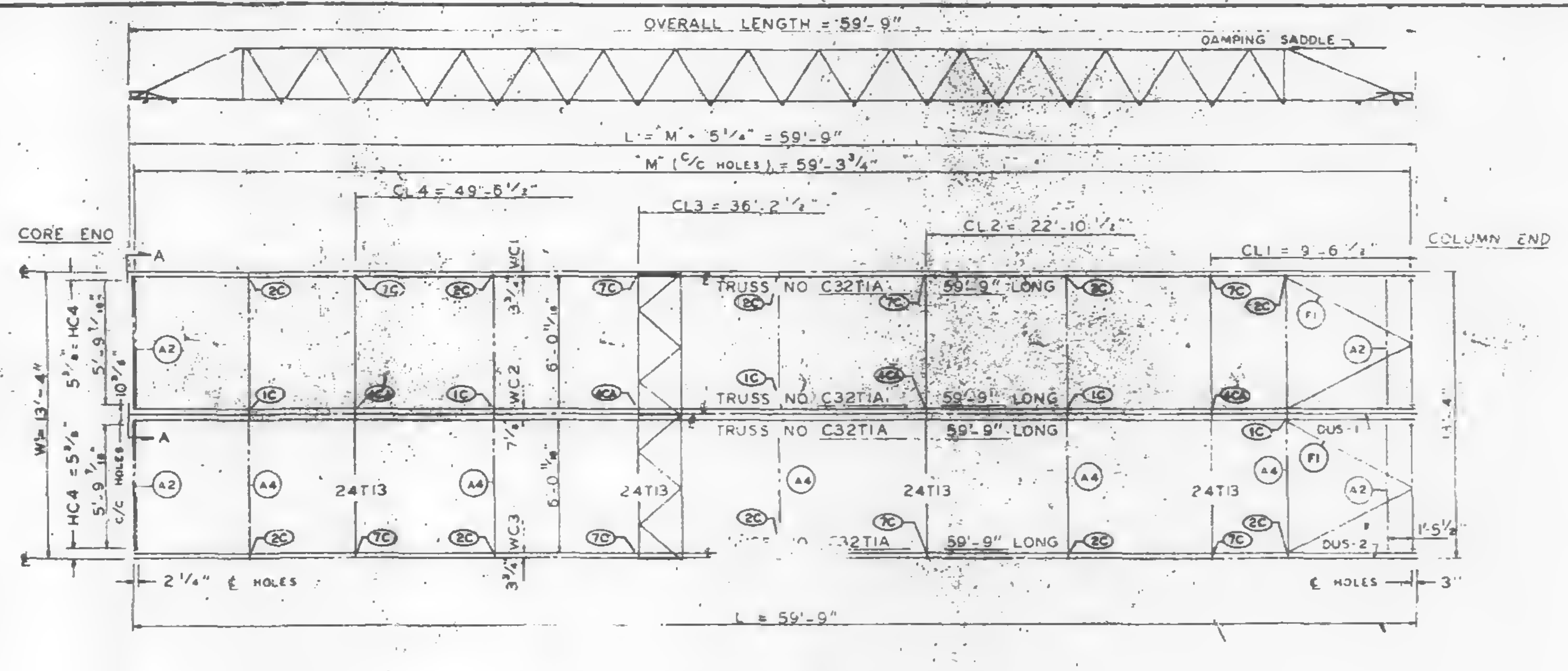
NO.	DATE	REVISION	BY

REF DRWG
7-AB4-3,3,1 1-3-68
7-AB4-15,16 & 39 7-22-68
7-AB4-42 10-15-68
SA-124 10-11-68
7-AB1-2 1-3-68
7-AB1-2 7-22-68
7-AB2-8 7-22-68

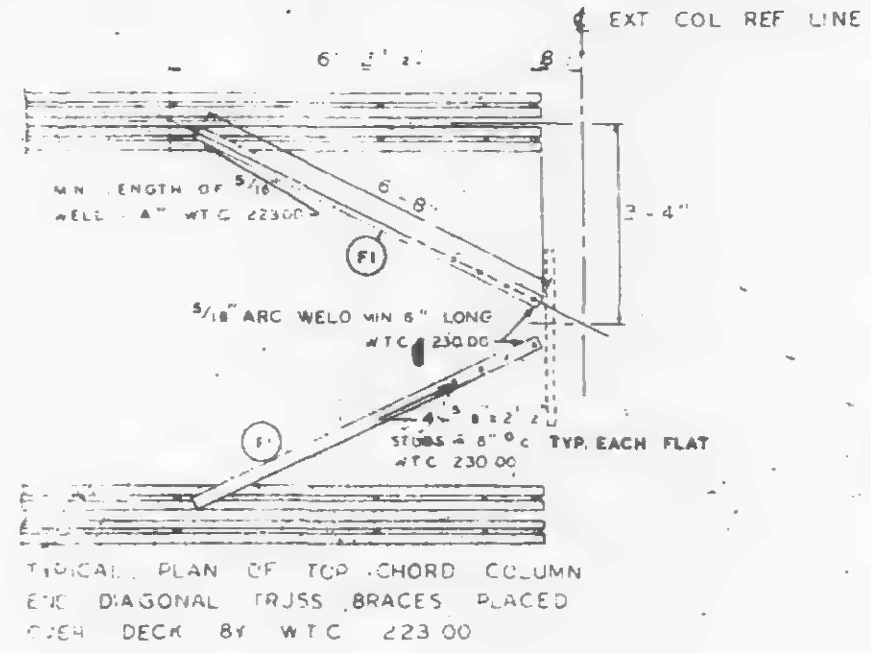
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 74(N)
PANEL 8RIP 13'-4" x 57'-7"

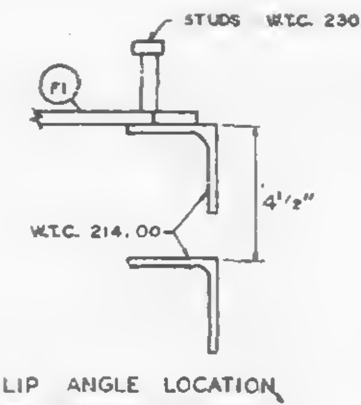
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED
DESIGN DRAWING NO. 7-AB3-6 7-22-68 PLATE
DATE 11/1/68
DRAWN BY
DATE 10-22-68
CHECKED BY TAKCHURA
DATE 10-22-68
IN CHARGE OF ENGR. DEY
FOR FABRICATOR
FABRICATION CONT NO. W.T.C. 221
SHEET FP 8RIP



PANEL NO B1A SIZE 13'-4" x 59'-9"

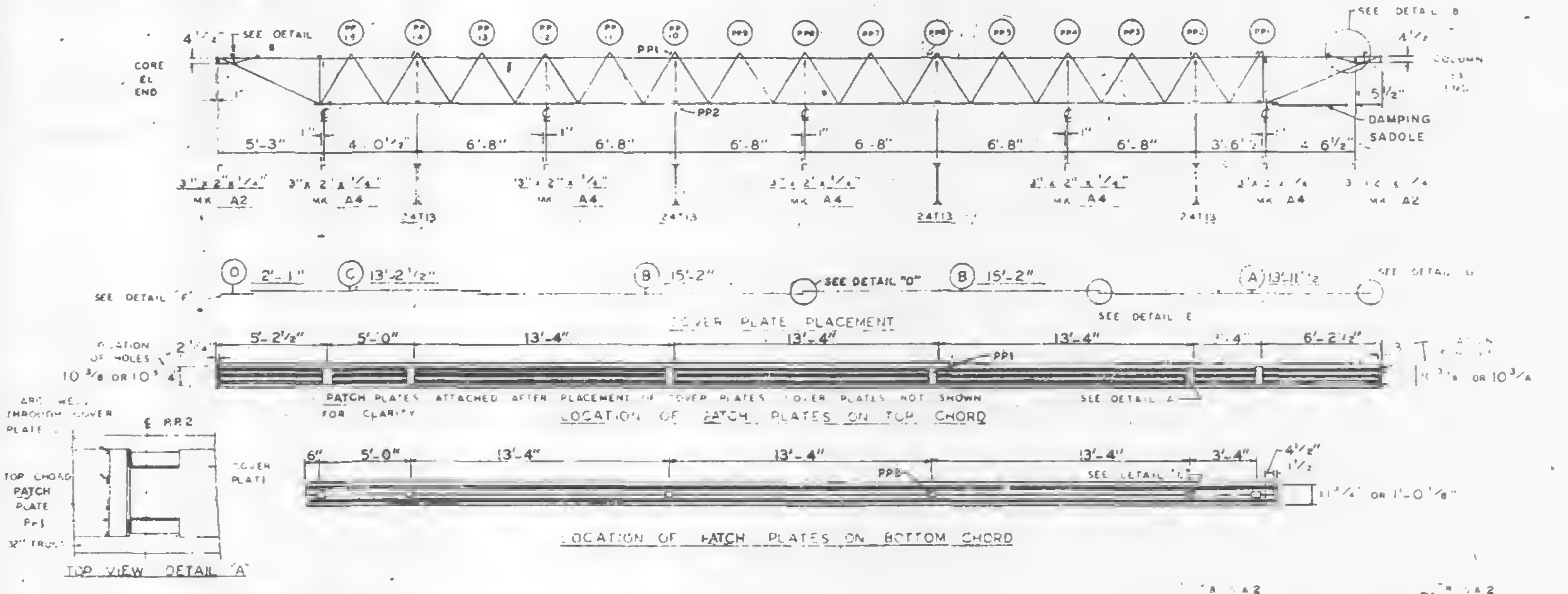

EXT COL REF LINE
5/16" ARC WELD MIN 6" LONG WTC 230.00
STUDS @ 8" °c TYP. EACH FLAT WTC 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

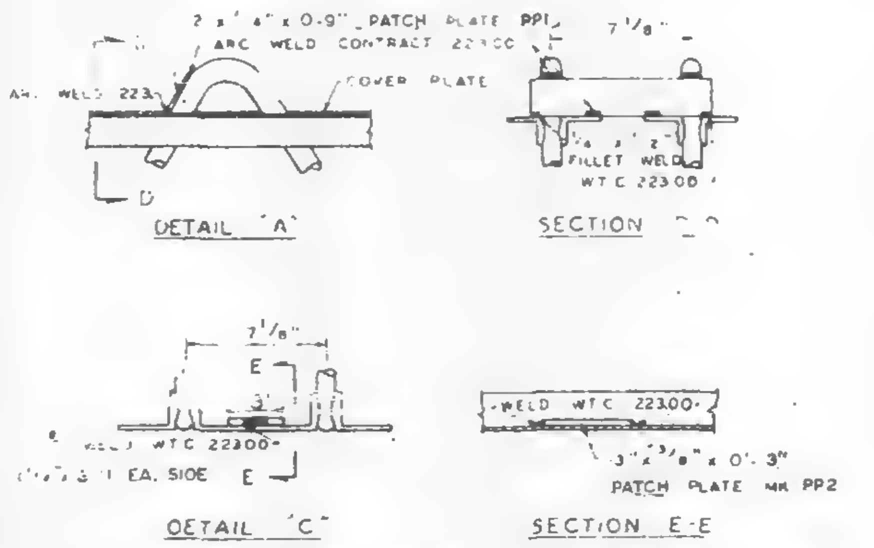


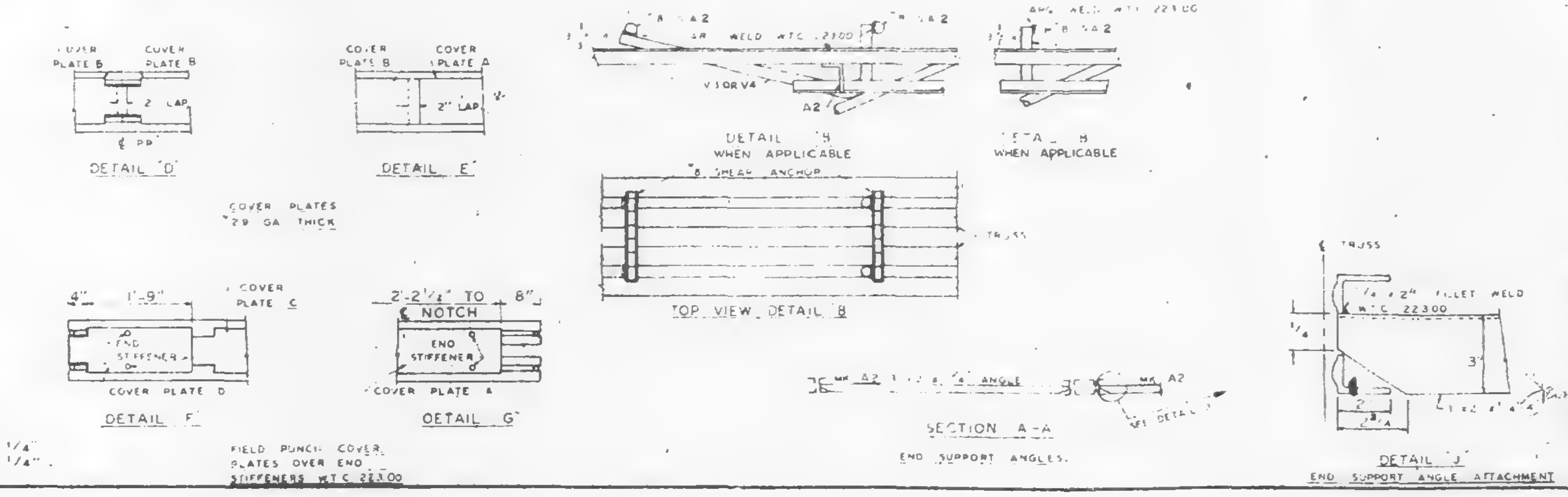
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

¢ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES



NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.





NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼"x1" FULL THROAT FILLET.
A = ¼"
B = ¼"

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1A	4	C32T1A - 59'-9"	ST201A
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3"x2"x¼" ANGLE	A2	4	3"x2"x¼"x5'-11 9/16"	ST403
	A4	5	3"x2"x¼ x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1½"x⅝"x6'-8"	ST402
PATCH PLATES	PP1	12	2"x¼"x0'-9"	ST 400
	PP2	12	3"x⅜"x0'-3"	ST 400
COVER PLATES	A	2	9"x.0135"x13'-11½"	ST303
	B	4	9"x.0135" x 15'-2"	ST303
	C	2	9"x.0135" x 13'-2½"	ST303
	D	2	9"x.0135" x 2'-1"	ST303
ANGLE CLIPS	C1	15	2"x1½"x¼"x0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3½"x3½"x⅜"x3'-6⅞"	ST298
	DUS-2	1	3½"x3½"x⅜"x3'-6⅞"	ST298
CONNECTION BAR	CB1	4	1"ø x 1'-3"	ST 400
CONNECTION PLATES	P1	8	3½" x ⅜" x 6½"	ST 400
	P2	4	4½" x .30" x 0'-9"	ST 400
	P3	4	4½" x .30" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
⚠1	7-15-68	GENERAL	T.M.C.

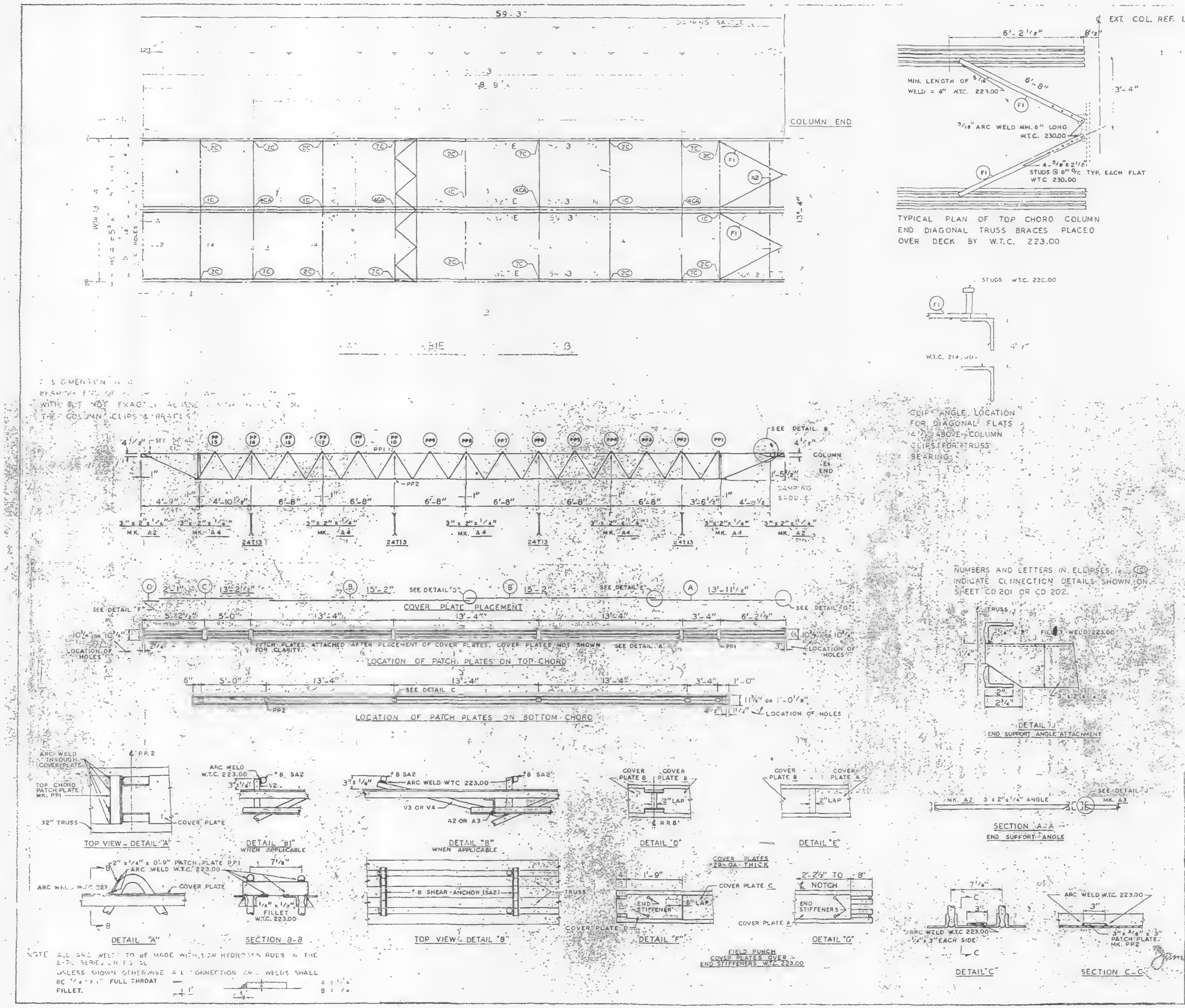
REF DRWG	
7-A84-3,3.1&30	1-3-68
7-A84-15&16	5-6-68
7-A84-42	4-1-68
SA-24	10-20-67
7-A83-2	1-3-68
7-A81-2	2-5-68
7-A82-8	2-15-68

LACLEDE STEEL

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68
69 (NORTH) PANEL B1A - 13'-4" x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-5 4-1-68 PLATE	
APPROVED FOR FABRICATION FOR PONYA	DATE 8/16/68	DRAWN BY DATE FEB. 24, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE FEB. 24, 1968	IN CHARGE OF PROD. DEV.
[redacted] DETAILED BY A.C. WEBER	FABRICATION CONT. WTC 221	SHEET NO FP B1A



NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR E 9 16

UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

	PP1	12		ST 400
PATCH PLATES	PP2	12	3"	ST 400
COVER PLATES				
		16	2" x 1 1/2" x 1/8" x 0'-6"	ST 400
	2	8		ST 400
	CS1	4	1'-3"	ST 400
CONNECTION PLATES	P1	5	7 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	7-15-68	GENERAL	T.M.C.

5-6-68
ABA 42 4-1-68

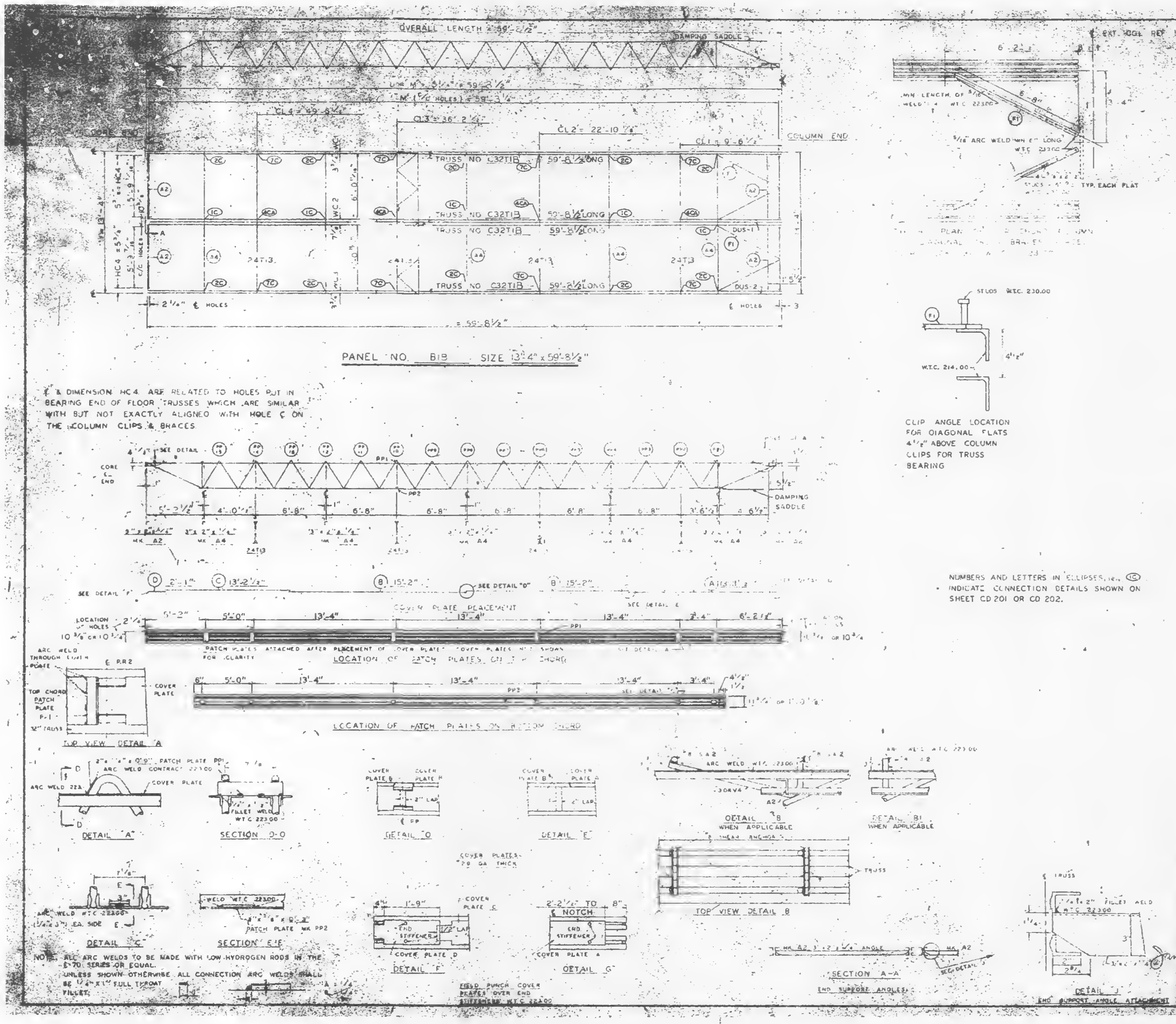
BLDG A FLOORS 10-11 (NORTH & SOUTH)

LACLEDE STEEL COMPANY

MADISON, ILLINOIS

James White Co. 8/16/68

DRAWN BY
DATE FEB 24, 1968
CHECKED BY
DATE FEB 24, 1968
LACLEDE STEEL CO.
321
FO BIE


OVERALL LENGTH = 59'-2 1/2"
DAMPING SADDLE
EXT. COL. REF. LINE
COLUMN END
TRUSS NO. C32T1B 59'-8 1/2" LONG
24T13
DUS-1
DUS-2
PANEL NO. 813 SIZE 13'-4" x 59'-8 1/2"
DAMPING SADDLE
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
DETAIL "B" WHEN APPLICABLE
DETAIL "B1" WHEN APPLICABLE
TOP VIEW DETAIL B
DETAIL "C"
SECTION E-E
DETAIL "F"
DETAIL "G"
SECTION A-A
END SUPPORT ANGLES
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e. ⓘ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	[illegible]
FLOOR TRUSSES	T1B	4	C32T1B - 59'-8 1/2"	ST 201B
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST 213
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x2'-8"	ST 402
PATCH PLATES	PP1	12	2"x[illegible]x0'-9"	ST 400
	PP2	12	3"x[illegible]x0'-3"	ST 400
[illegible] PLATES	A	[illegible]	9"x .0135" x [illegible] 1/2"	ST 303
	B	3	9"x .0135" x 15'-2"	ST 303
	C	7	9" x .0135" x 13'-2 1/2"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
ANGLE [illegible]	[illegible]	16	[illegible] x 0'-6"	ST 400
[illegible] HOR	SA2	8	[illegible] x 0'-9"	ST 400
[illegible] SADDLE	DUS-1	1	[illegible] x 3'-5 7/8"	ST 298
	DUS-2	1	[illegible] x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

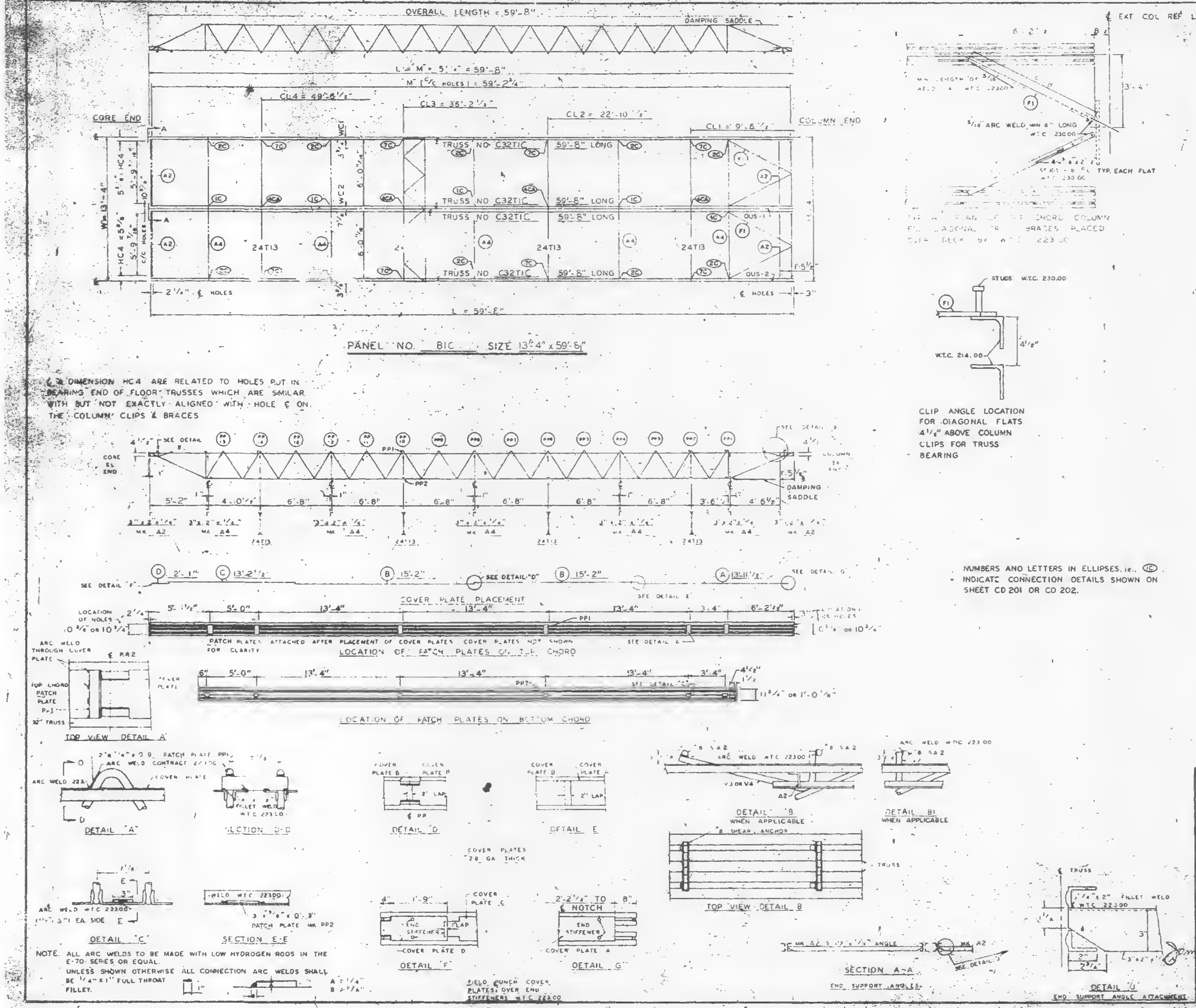
NO.	DATE	REVISION	BY

[illegible] 3-68
[illegible] 6-68
[illegible] A2 4-1-68
[illegible] 5-20-67
[illegible] 1-3-68
[illegible] 2-15-68
[illegible] 2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83-91, 93-106 (N)
PANEL 813 - 13'-4" x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 [illegible] 4-1-68 PLATE
APPROVED FOR FABRICATION [illegible] FOR P.O.N.Y.A. DATE 10/23/68
DRAWN BY [illegible] DATE OCT. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. [illegible] DATE OCT. 5, 1968
IN CHARGE OF [illegible]
LACLEDE STEEL CO.
DETAILED BY A.C. [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP 813



€ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e., ⓒ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	REF. DRWG.
FLOOR TRUSSES	T1C	4	C32T1C - 59'-8"	ST201C
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST219
3" x 2" x ¼" ANGLE	A2	4	3" x 2" x ¼" x 5'-11 9/16"	ST403
	A4	5	3" x 2" x ¼ x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1½" x 5/8" x 6'-8"	ST402
PATCH PLATES	PP1	12	2" x ¼" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	2	9" x .0135" x 13'-11½"	ST303
	B	4	0" x .0135" x 15'-2"	ST303
	C	2	0" x .0135" x 13'-2½"	ST303
	D	2	0" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1½" x ¼" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3½" x 3½" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3½" x 3½" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3½" x 3/8" x 6½"	ST 400
	P2	4	4½" x .30" x 0'-9"	ST 400
	P3	4	4½" x .30" x 1'-0"	ST 400

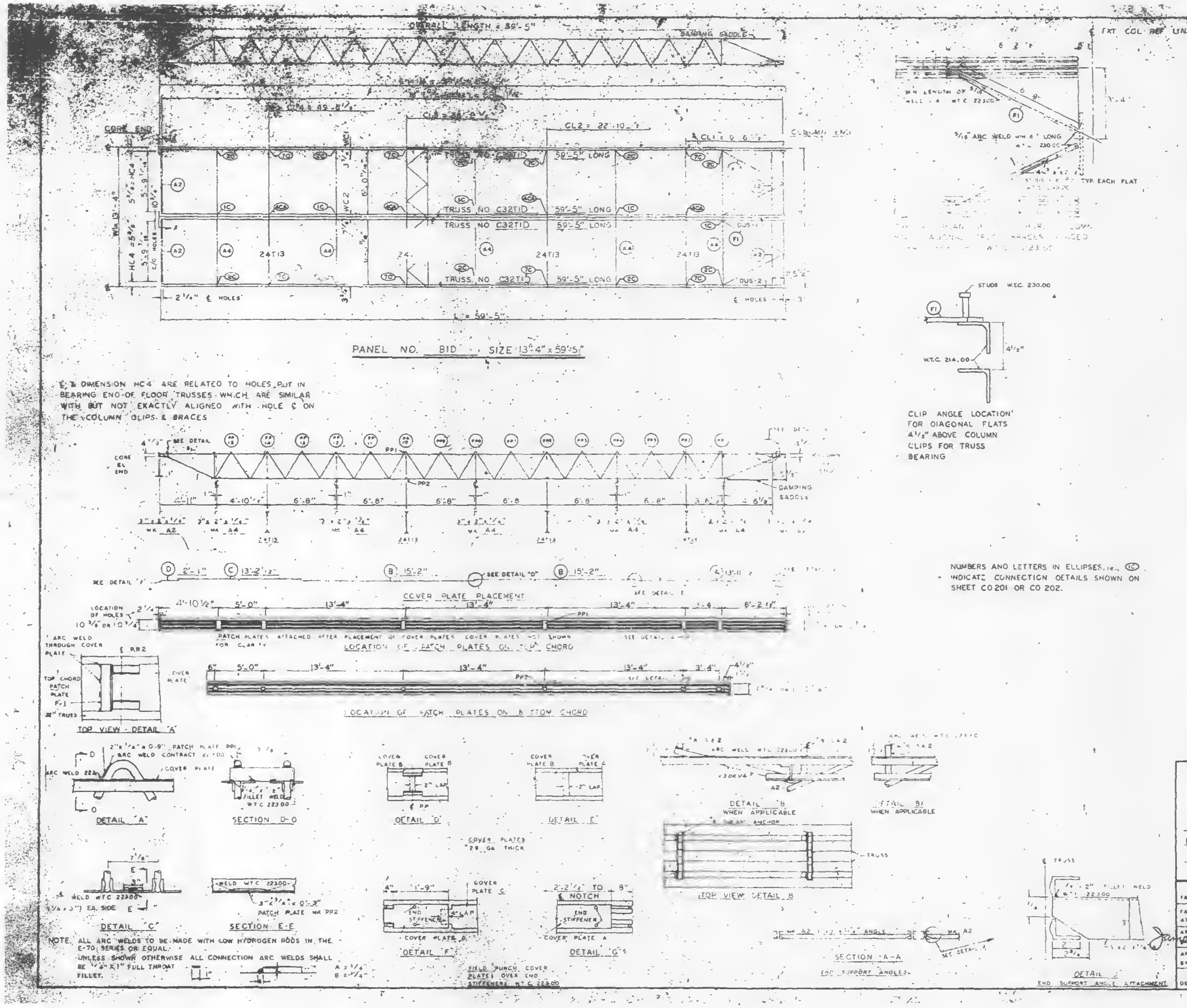
NO.	DATE	REVISION	BY

REF DRWG
7 AB4 3,3,1 & 30 1-3-68
7 AB4 15 & 16 5-6-68
7 AB4 A2 4-1-68
[illegible] 24 10-20-67
7-AB3-2 1-3-68
7 AB1 2 2-5-68
7-AB2 8 2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 49-58, 60-66, 68-74, 79 91, 93-106
PANEL B1C - 13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-5 4-1-68 PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. DATE 10/23/68
DRAWN BY [illegible] DATE OCT. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE [illegible] 1968 IN CHARGE OF [illegible]
DETAILED BY [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FB B1C



PANEL NO. B1D - SIZE 13'-4" x 59'-5"

E & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CO 201 OR CO 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" X 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1D	4	C32T1D - 59'-5"	ST202
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3" x 2" x 1/4" ANGLE	A2	4	3"x2"x1/4"x 5'-11 5/16"	ST403
	A4	5	3"x2"x1/4" x 13'-8"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x 5/16"x 6'-8"	ST402
PATCH PLATES	PP1	12	2"x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2 1/2"	ST403
	D	2	9" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-4	1	3 1/2"x3 1/2"x 4/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/8" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

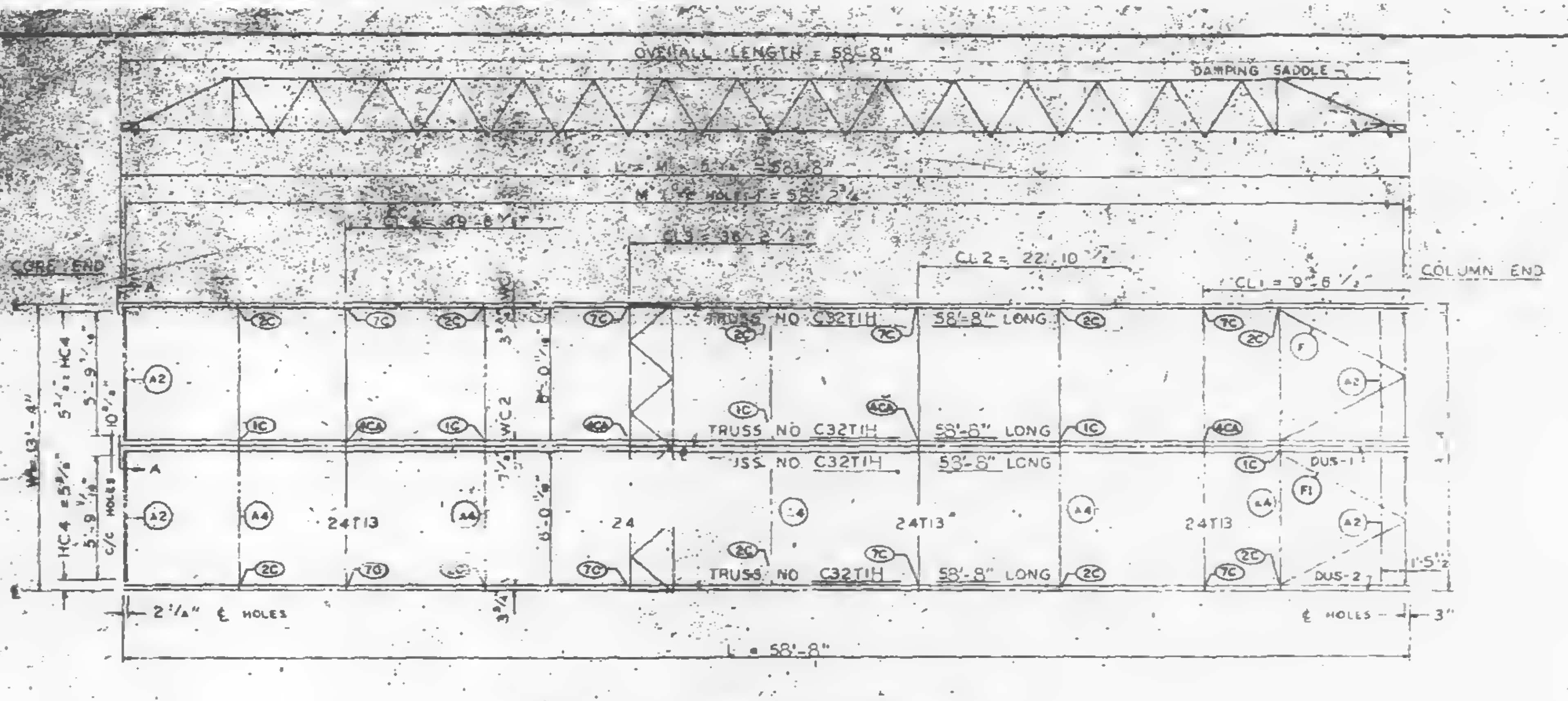
NO.	DATE	REVISION	BY

REF. DRWG
7 484 3,3,1,4,39 4-1-68
7 484 15,6,5 5-6-68
7 484 42 4-1-68
A 24 10-20-67
7 483 2 4-4-68
7 481 2 4-5-68
7 482 3 [illegible]

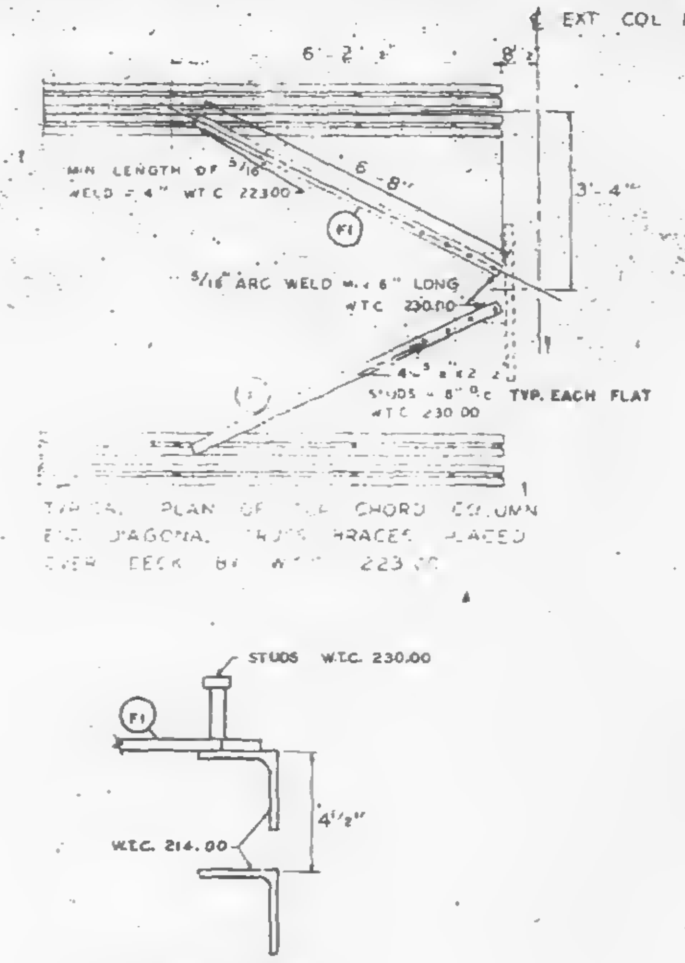
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 81-82 N
PANEL B1D 13'-4" x 59'-5"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 483 5 4-1-68 PLATE	
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A.	DATE 10/23/68	DRAWN BY [illegible] DATE OCT 15, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE OCT 1_, 1968	IN CHARGE OF [illegible]
LACLEDE STEEL CO. DETAILED BY A. C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET / NO. FP B1D



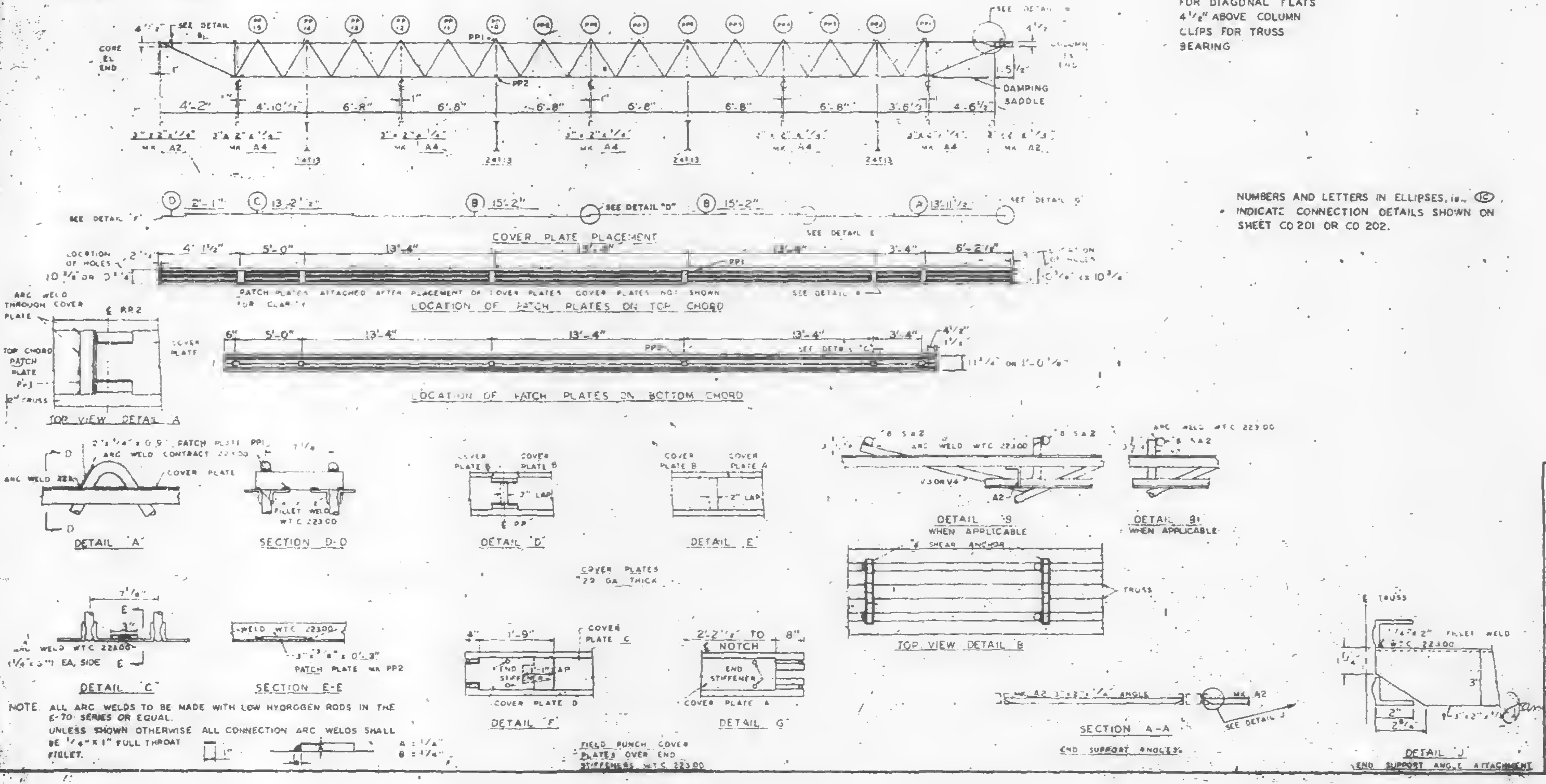
PANEL NO. B1H SIZE 13'-4" x 58'-8"



EXT. COL. REF. LINE
6'-2"
6'-8"
3'-4"
MIN LENGTH OF 5/16 WELD 2 4" WTC 22300
5/16 ARC WELD 4 1/4" x 8" LONG WTC 230.00
STUDS - 8" ℄ TYP. EACH FLAT WTC 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL FLATS BRACES PLACED OVER DECK BY WTC 223.00
STUDS WTC 230.00
WTC 214.00
4 1/2"

CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4 1/2" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



NUMBERS AND LETTERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				[illegible] DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1H	4	C32T1H · 58'-8"	ST201H
BRIDGING TRUSSES	T13	4	24T13 · 13'-2"	ST213
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 9/16"	ST403
	A4	5	3"x2"x1/4"x13'-8"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 8'-8"	ST402
PATCH PLATES	PP1	12	2"x 1/4"x 0'-9"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	A	2	9"x .0135"x 13'-11 1/2"	ST303
	B	4	9"x .0135"x 15'-2"	ST303
	C	2	9"x .0135"x 13'-2 1/2"	ST303
	D	2	9"x .0135"x 2'-1"	ST303
ANGLE CLIPS	C1	16	2"x 1 1/2"x 1/4"x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/8"x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

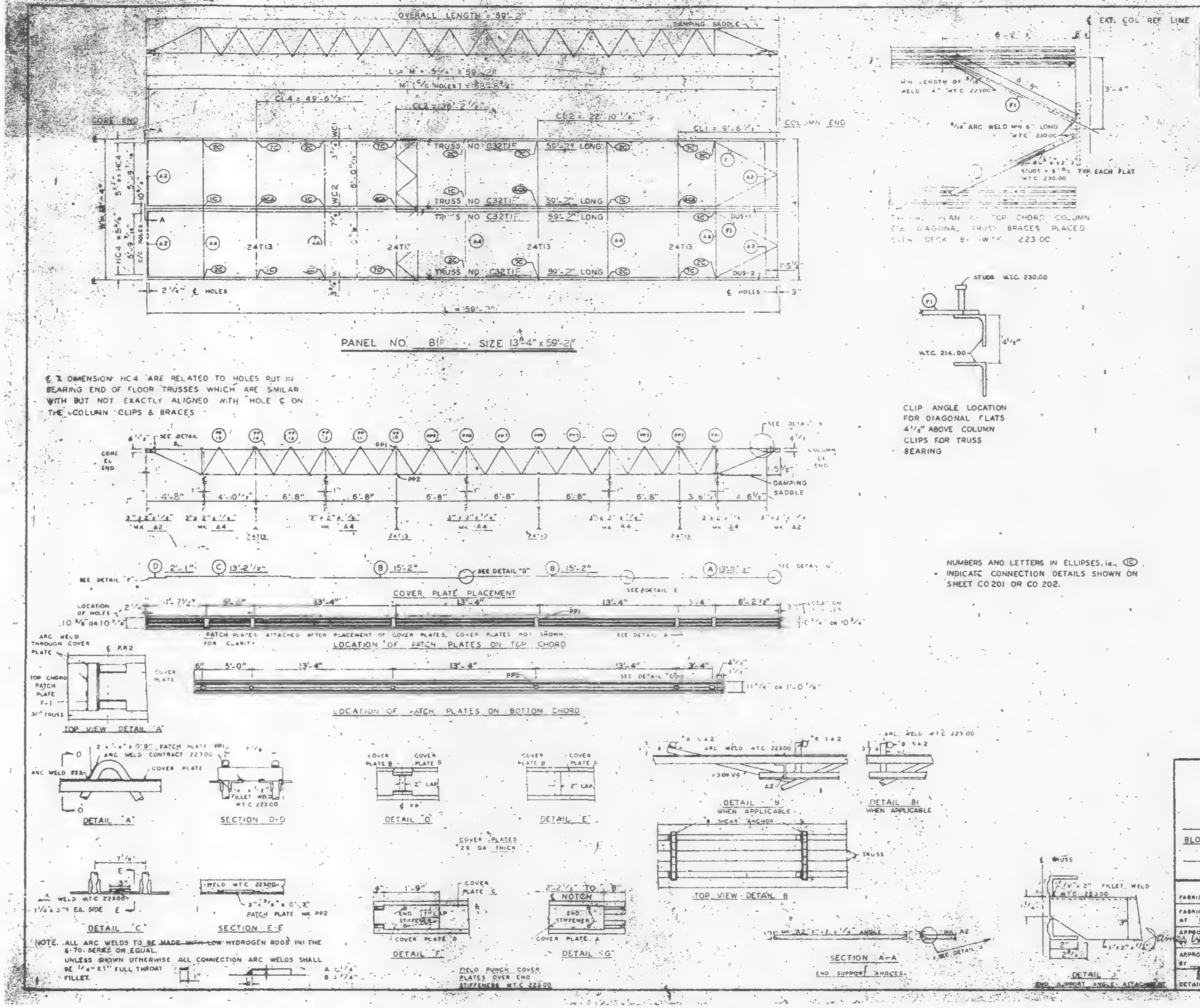
NO.	DATE	REVISION	BY

REF DRWG
7-AB4 J,3,1&39 1-3-68
7-AB4-15&16 5-6-68
7-AB4-42 8-1-68
SA-124 10-20-67
7-AB3-2 1-3-68
7-AB1-2 2-5-68
7-AB2-8 2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A · FLOORS 79-80(N)
PANEL B1H - 13'-4" x 58'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT- MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-5 4-1-68 PLATE
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A. DATE 10/23/68
DRAWN BY [illegible] DATE [illegible], 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE OCT. [illegible], 1968
IN CHARGE OF [illegible]
LACLEDE STEEL
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP B1



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4 1/2" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING

NUMBERS AND LETTERS IN ELLIPSES, ie., ①C INDICATE CONNECTION DETAILS SHOWN ON SHEET CO 201 OR CO 202.

NOTE. ALL ARC WELDS TO BE MADE ~~WITH LOW~~ HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	[illegible]
FLOOR TRUSSES	T1F	4	C32T1F - 59'-2"	ST 301F
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST 213
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST 402
PATCH PLATES	PP1	12	2"x1/4"x0'-9"	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
COVER PLATES	A	2	9"x.0135"x13'-11 1/2"	ST 303
	B	4	9"x.0135"x15'-2"	ST 303
	C	2	9"x.0135"x13'-2 1/2"	ST 303
	D	2	9"x.0135"x2'-1"	ST 303
ANGLE CLIPS	C1	16	2"x1 1/2"x1/4"x0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST 290
	DUS-2	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST 290
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

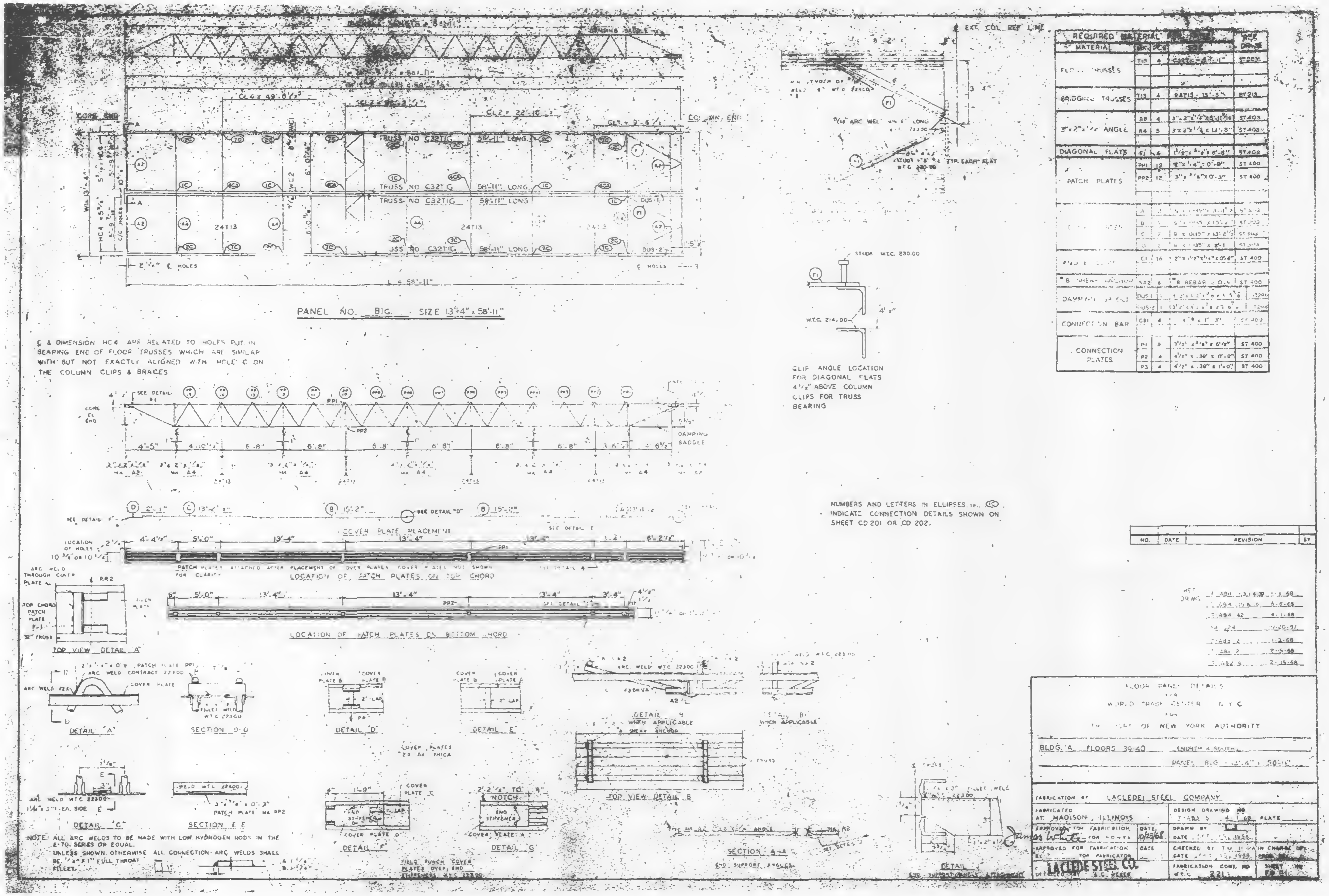
NO.	DATE	REVISION	BY

REF DRWG	
7-AB4-3,3,1 & 39	1-3-68
7-AB4-15 & 16	5-6-68
7-AB4-42	4-1-68
SA 124	10-20-67
7-AB3-2	1-3-68
7-AB1-2	2-5-68
7-AB2-8	2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-49(S), 47-45, 70-71(N)
PANEL B1F - 13'-4" x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-5 4-7-68 PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A DATE 10/23/68
DRAWN BY [illegible] DATE OCT 1?, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY [illegible] DATE OCT 1?, 1968
IN CHARGE OF [illegible]
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. B1F



PANEL NO. B1G SIZE 13'-4" x 58'-11"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T16	4	C32TIG x 58'-11"	ST 2016
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST 213
3"x 2" x 1/4" ANGLE	A2	4	3" x 2" x 1/4" x 5'-11 9/16"	ST 403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST 403
DIAGONAL FLATS	F1	4	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	4" x 1/4" x 0'-8"	ST 400
	PP2	12	3" x 1/4" x 0'-3"	ST 400
[illegible]	A	[illegible]	[illegible] x 3'-1 1/2"	ST 503
	B	[illegible]	9" x .045" x 15'-2"	ST 503
	C	2	9" x .045" x 13'-2 1/2"	ST 503
	D	2	9" x .035" x 2'-1"	ST 503
[illegible]	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	[illegible]	[illegible]
	DUS-2	1	[illegible] x 3'-6 7/8"	[illegible]
CONNECTION BAR	CB1	4	1 1/8" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-0"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

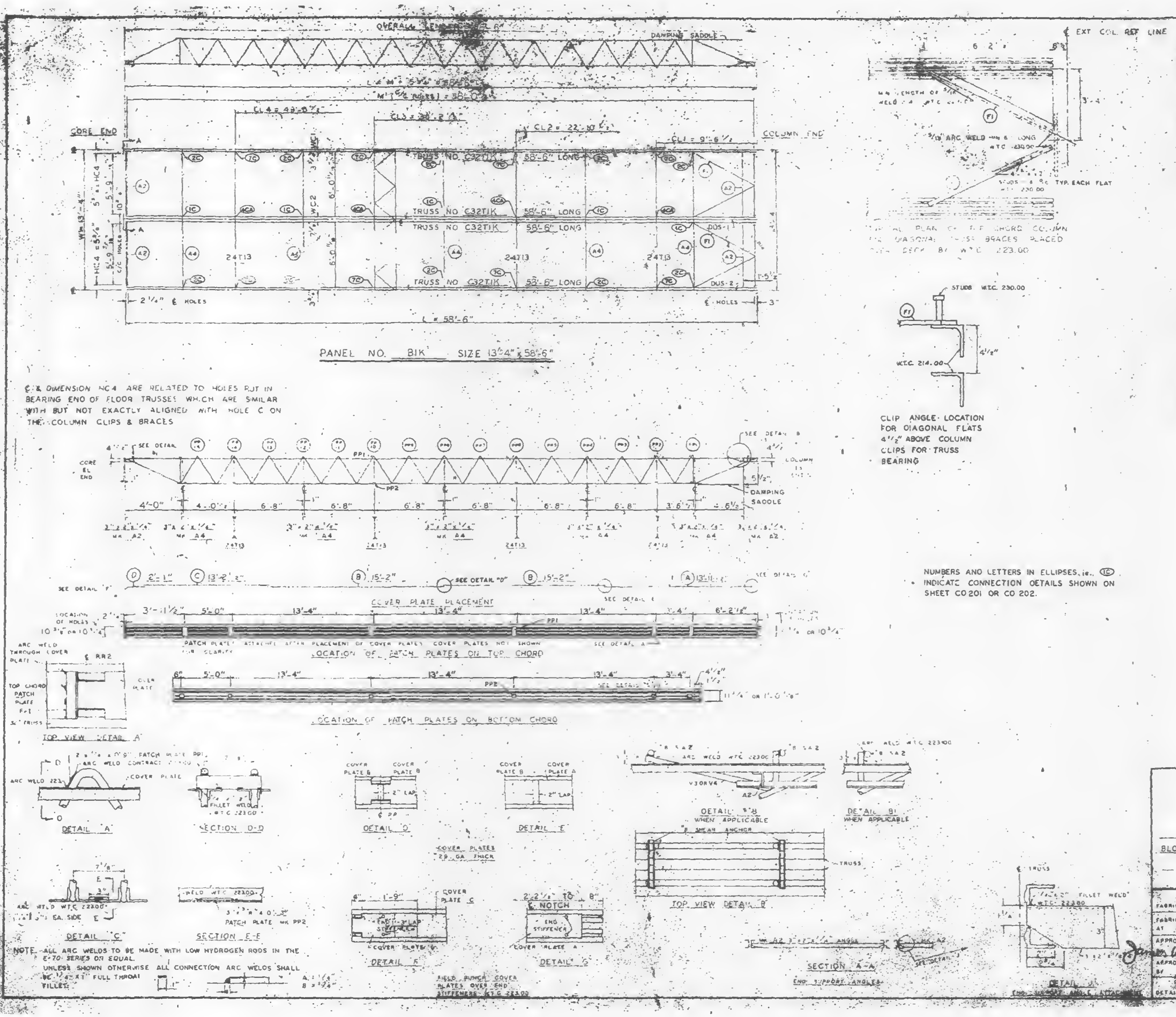
NO.	DATE	REVISION	BY

REF. DRWGS.
7-ABA 5 4-1-68
7-ABA 42 4-1-68
[illegible] 10-20-67
7-ABA 2 1-3-68
7-ABA 2 2-5-68
7-AB2 5 2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (NORTH & SOUTH)
PANEL B1G 13'-4" x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-ABA 5 4-1-68 PLATE
APPROVED FOR FABRICATION FOR PONYA James White DATE 10/23/68
DRAWN BY [illegible] DATE OCT. 15, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. [illegible] DATE OCT. 15, 1968
IN CHARGE OF [illegible]
LACLEDE STEEL CO.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. [illegible] B1G



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

NUMBERS AND LETTERS IN ELLIPSES, ie. ⑮ INDICATE CONNECTION DETAILS SHOWN ON SHEET CO201 OR CO202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER [illegible]				
MATERIAL	[illegible]		[illegible]	[illegible]
FLOOR TRUSSES	[illegible]	4	C32TIK - 58'-6"	[illegible]
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 9/16"	ST403
	A4	5	3"x2"x1/4"x13'-3"	ST403
DIAGONAL FLATS	F1	2	1 1/2"x3/8"x8'-8"	ST402
PATCH PLATES	PP1	12	2"x1/4"x0'-9"	ST400
	PP2	12	3"x3/8"x0'-3"	ST400
COVER PLATES	A	2	9"x.0135"x13'-11 1/2"	ST303
	B	4	9"x.0135"x15'-2"	ST303
	C	2	9"x.0135"x13'-2 1/2"	ST303
	D	2	9"x.0135"x2'-1"	ST303
ANGLE CLIPS	C1	16	2"x1 1/2"x1/4"x0'-8"	ST400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x3/8"x3'-8 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x3/8"x3'-3 7/8"	ST298
CONNECTION BAR	CB1	4	1"ø x 1'-3"	ST400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST400
	P2	4	4 1/2" x .30" x 0'-9"	ST400
	P3	4	4 1/2" x .30" x 1'-0"	ST400

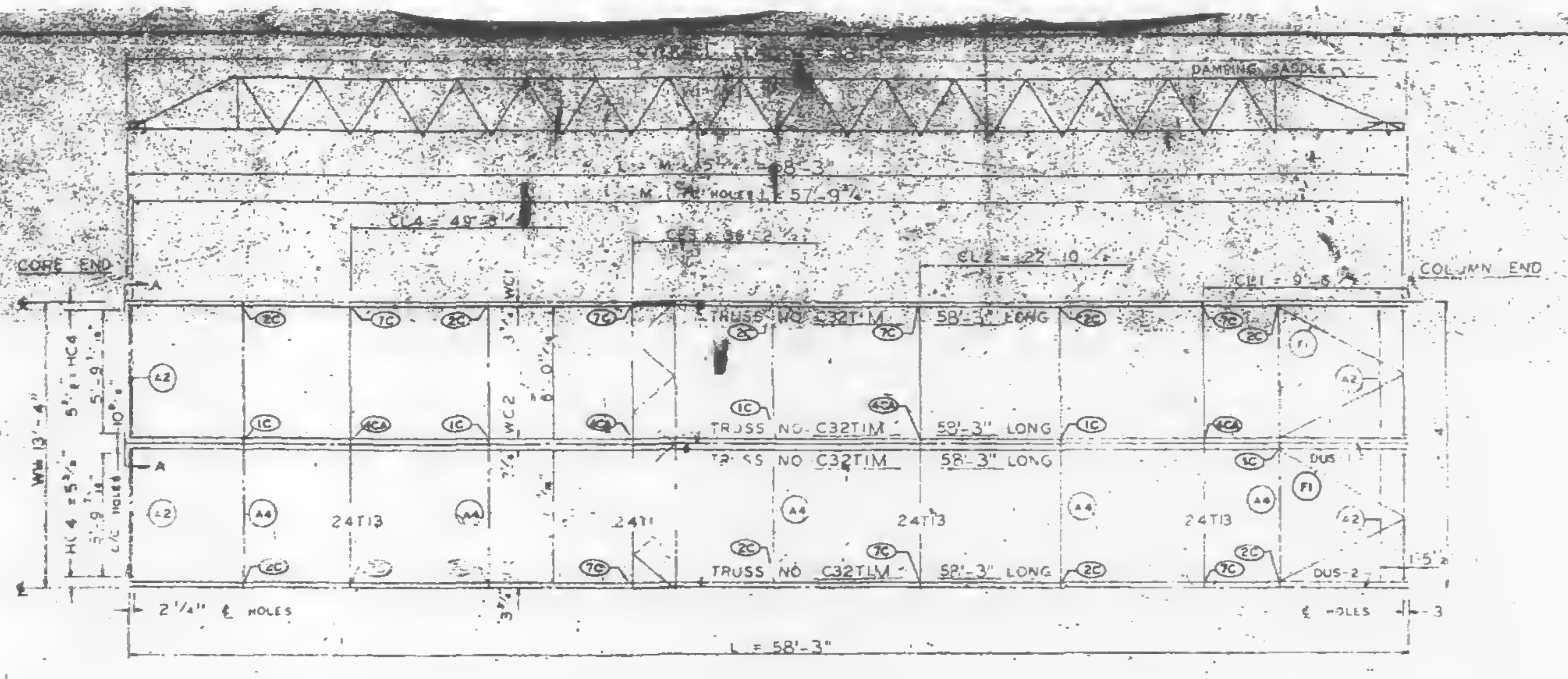
NO.	DATE	REVISION	BY

REF. DRWG.
7-AB4-3,3,14,30 — [illegible]
7-AB4-15 & 16 — 5-6-68
7-AB4-42 — 4-1-68
SA-4 — [illegible]
7-AB3-2 — [illegible]
7-AB1-2 — 2-[illegible]-58
7-AB2-[illegible] — 2-15-58

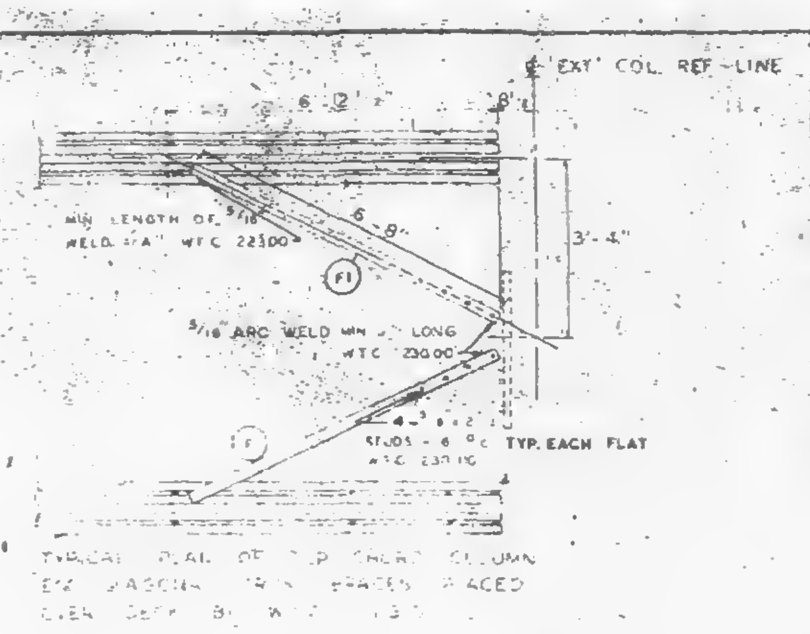
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

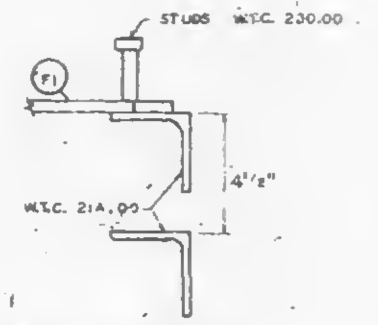
BLDG. A FLOORS 45-46(S) & 46(N)
PANEL B1K 13'-4" x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-5 [illegible] STATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. James White — DATE 10/23/68
DRAWN BY [illegible] DATE OCT. [illegible] 1968
APPROVED FOR FABRICATION BY LACLEDE STEEL CO. FOR FABRICATOR — DATE
CHECKED BY [illegible] DATE OCT. [illegible] 1968 — IN CHARGE OF [illegible]
DETAILED BY A.C. WEARE
FABRICATION CONT. NO. W.T.C. 221 — SHEET NO. [illegible]



PANEL NO. B1M SIZE 13'-4" x 58'-3"

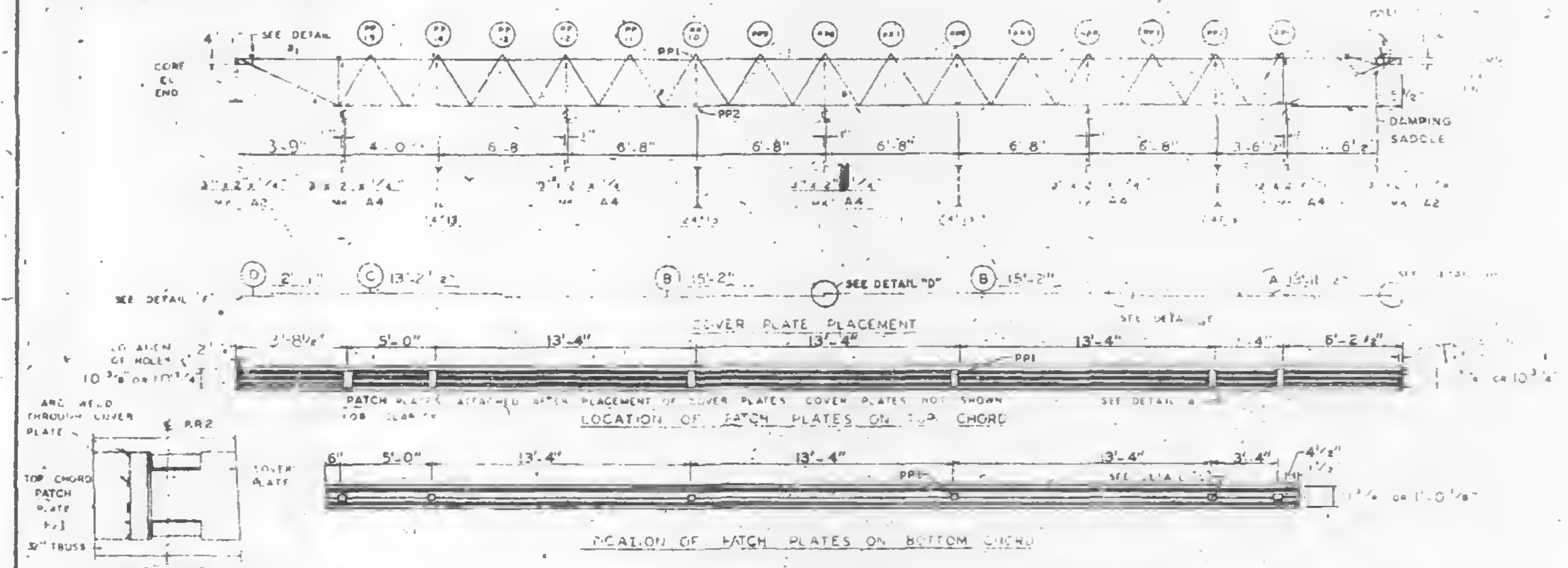

€ EXT'L COL. REF. LINE
MIN LENGTH OF 5/16" WELD FLAT W.T.C. 22300
3/16 ARC WELD MIN LONG W.T.C. 22300
STUDS TYP. EACH FLAT
3'-4"
F1



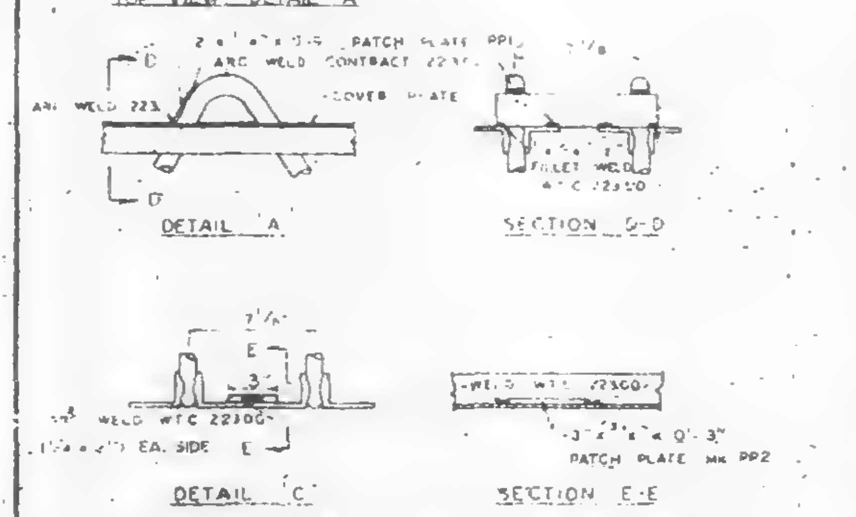
CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4 1/2" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T1M	4	C32T1M - 58'-3"	ST201M
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3" x 2" x 1/4" ANGLE	A2	4	3" x 2" x 1/4" x 5'-11 9/16"	ST403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST403
DIAGONAL FLATS	F	4	1 1/2" x 5/8" x [illegible]-8"	ST402
PATCH PLATES	PP1	12	2 [illegible] x 0'-9"	ST400
	PP2	12	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	2	9" x 0.35" x 56'-1 1/2"	ST303
	B	2	9" x 0.35" x 15'-2"	ST303
	C	2	9" x 0.35" x 13'-2"	ST303
	D	2	9" x 0.35" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-[illegible]	ST400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST400
	P2	4	4 1/2" x .30" x 0'-9"	ST400
	P3	4	4 1/2" x .30" x 1'-0"	ST400

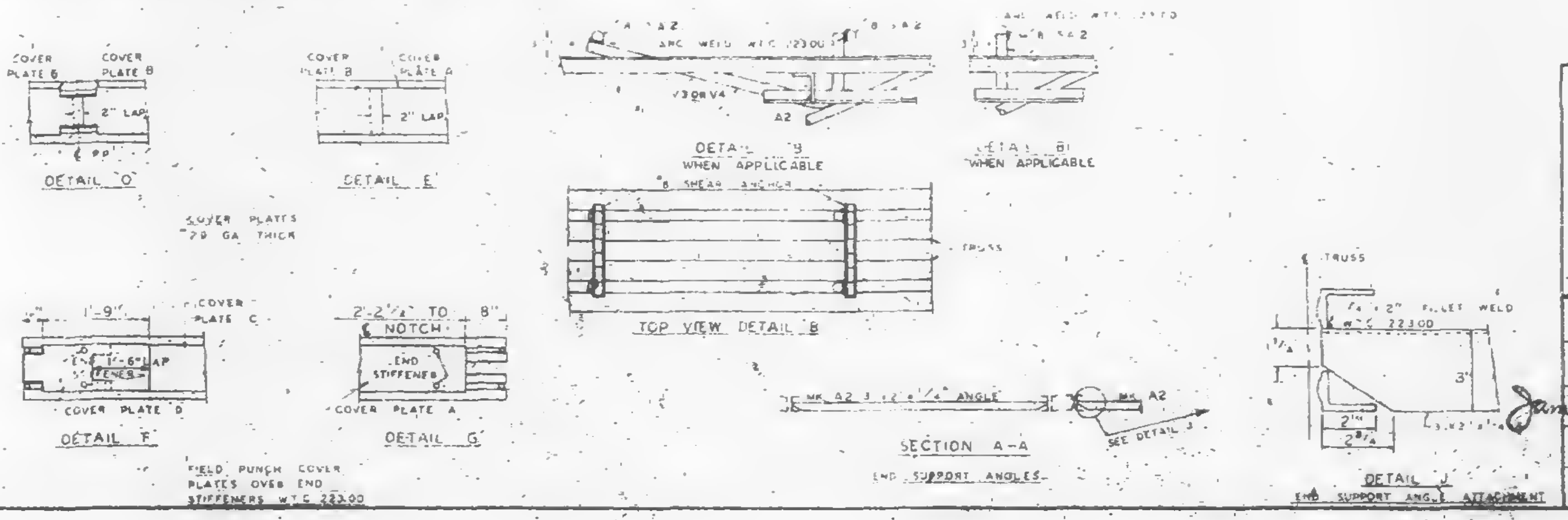
€ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES


SEE DETAIL B1
CORE € END
PP1
PP2
DAMPING SADDLE
3'-9"
4'-0"
6'-8"
A2
A4
SEE DETAIL "D"
COVER PLATE PLACEMENT
PP1
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
SEE DETAIL A
TOP VIEW DETAIL A
13'-4"
5'-0"
LOCATION OF PATCH PLATES ON BOTTOM CHORD

NUMBERS AND LETTERS IN ELLIPSES, ie. ⓘⒸ
INDICATE CONNECTION DETAILS SHOWN ON
SHEET CD 201 OR CD 202.



NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



NO.	DATE	REVISION	BY

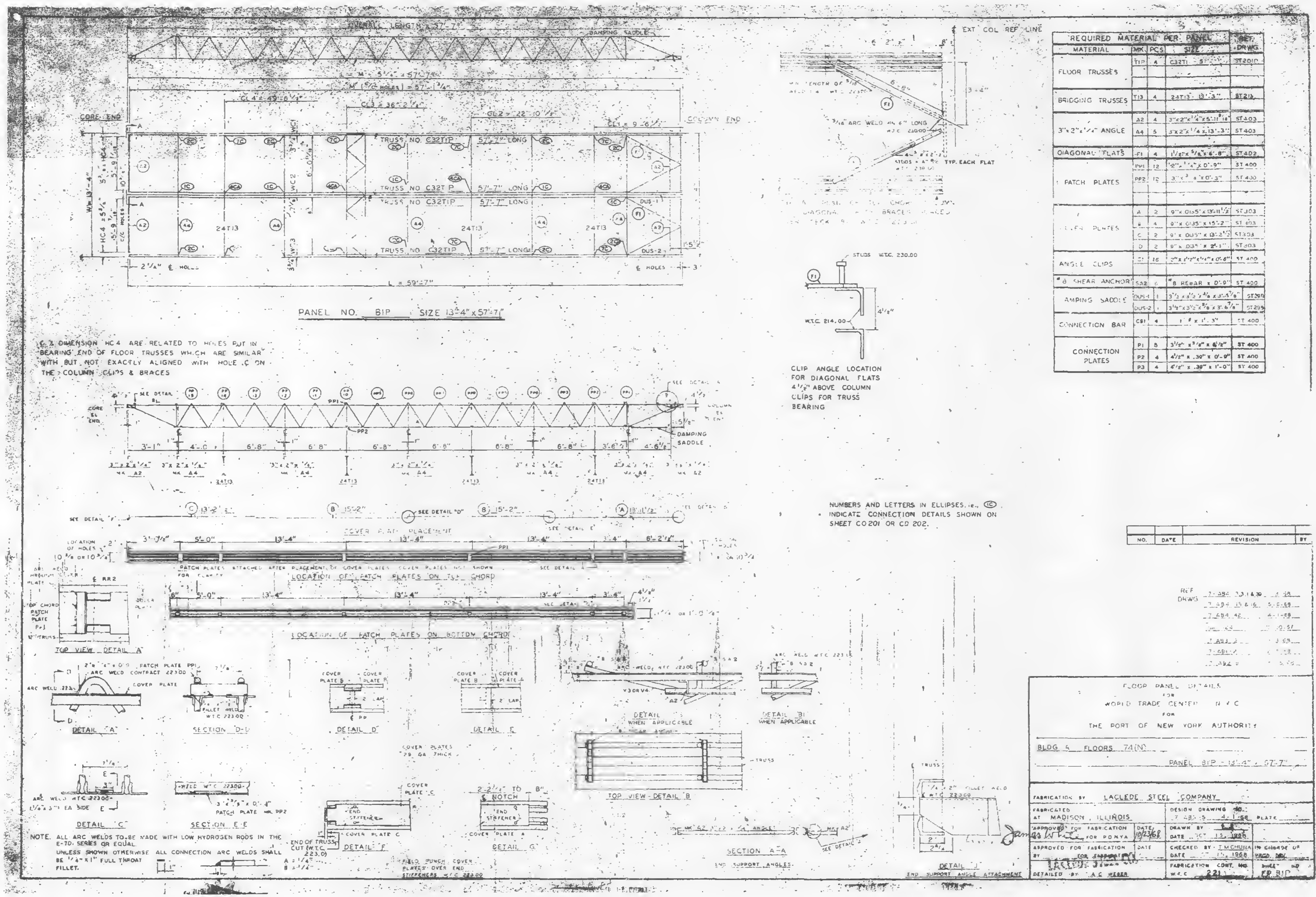
REF DRWG
684 3, 3 & 30 1-3-68
684 15 & 6 5-6-68
684 42 4-1-68
[illegible] 10-20-67
ABS-2 1-3-68
AB1-2 2-5-68
AB2-1 2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 N)
PANEL B1M - 13'-4" x 58'-3"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 4-AB3-5 4-1-68 PLATE 2	
APPROVED FOR FABRICATION James White FOR PONYA	DATE 10/23/68	DRAWN BY [illegible] DATE OCT. 15, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE OCT. 15, 1968	IN CHARGE OF PROD. ENG.
DETAILED BY A.C. WEBER		FABRICATION CONT NO. W.T.C. 221	SHEET NO. FP B1-1

LACLEDE STEEL



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4 1/2" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING

NUMBERS AND LETTERS IN ELLIPSES, ie., Ⓘ INDICATE CONNECTION DETAILS SHOWN ON SHEET CO 201 OR CD 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T1P	4	C32T1 - 57'-7"	ST201D
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 9/16"	ST403
	A4	5	3"x2"x1/4"x13'-3"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST303
	B	4	9" x .035" x 15'-2"	ST303
	C	2	9" x .035" x 13'-2 1/2"	ST303
	D	2	9" x .035" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2 x 3 1/2 x 3/8 x 3'-5 7/8"	ST295
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST295
CONNECTION BAR	CB1	4	1" # x 1'-3"	ST 400
CONNECTION PLATES	P1	8	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

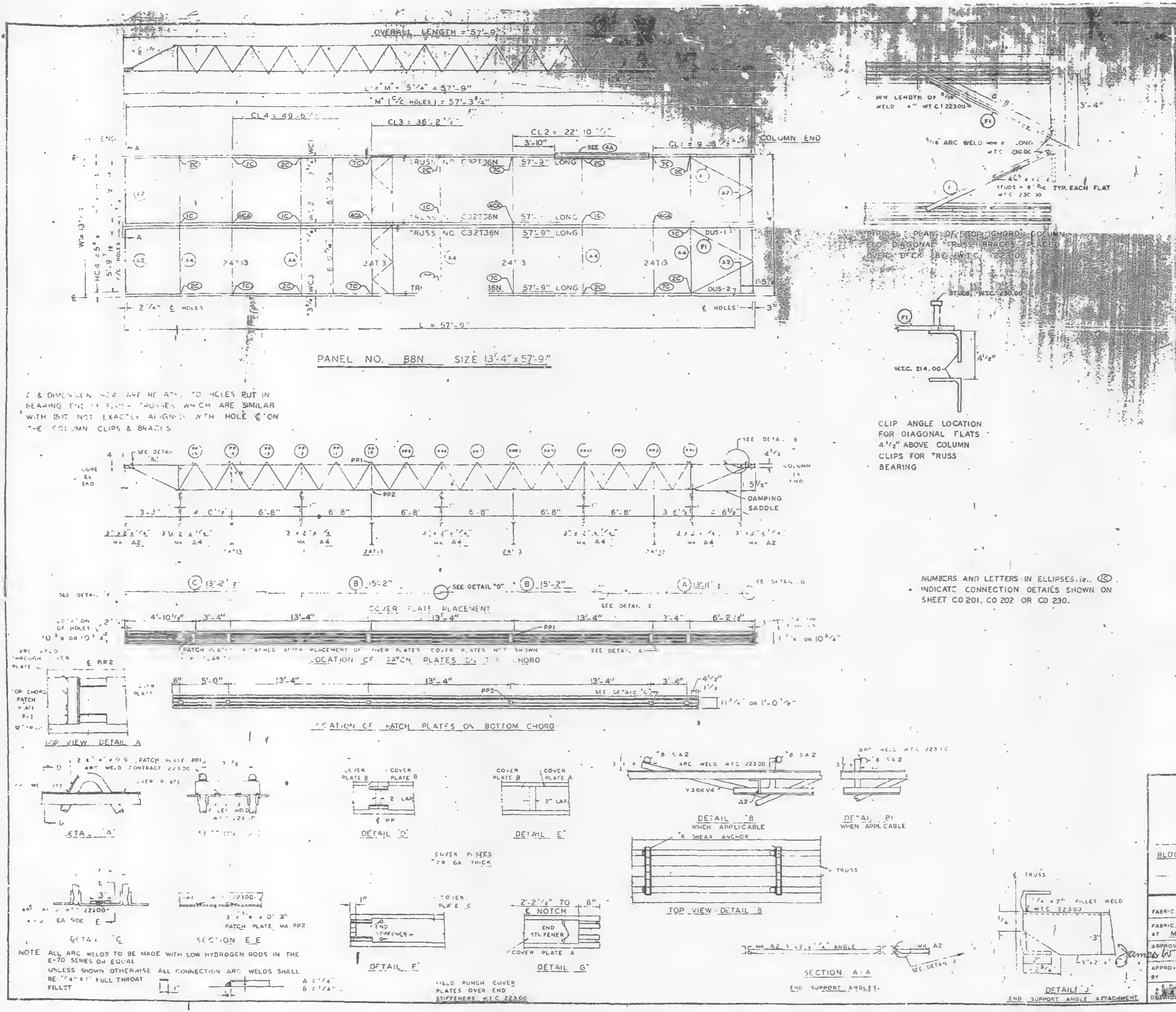
NO.	DATE	REVISION	BY

REF DRWG
7-484 33,1 & 30 [illegible]
7-484 15 & 16 5-6-68
7-484 42 4-1-68
[illegible]
7-481 2 [illegible]
7-481-4 [illegible]
7-482 8 [illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 74(N)
PANEL B1P - 13'-4" x 57'-7"

FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-485-5 4-1-68 PLATE	
APPROVED FOR FABRICATION James White FOR P.O.N.Y.A. DATE 10/23/68	DRAWN BY [illegible] DATE OCT. 15, 1968	
APPROVED FOR FABRICATION BY FOR [illegible] DATE	CHECKED BY T.M.CHURA DATE OCT. 15, 1968	IN CHARGE OF ENGR. DEV.
DETAILED BY A.C. WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B1P


OVERALL LENGTH = 57'-9"
L = "M" + 5 1/4" = 57'-9"
"M" (C/C HOLES) = 57'-3 3/4"
CL4 = 49'-6"
CL3 = 36'-2"
CL2 = 22'-10"
CL1 = 9'-8"
COLUMN END
TRUSS NO. C32T36N 57'-9" LONG
TRUSS NO. C32T36N 57'-9" LONG
TRUSS NO. C32T36N 57'-9" LONG
24T13
DUS-1
DUS-2
W = 13'-4"
HC4 = 5'-9"
L = 57'-9"
PANEL NO. B8N SIZE 13'-4" x 57'-9"
DAMPING SADDLE
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL A
DETAIL A
SECTION D-D
DETAIL C
SECTION E-E
DETAIL D
DETAIL E
DETAIL F
DETAIL G
DETAIL B WHEN APPLICABLE
DETAIL B1 WHEN APPLICABLE
TOP VIEW DETAIL B
SECTION A-A END SUPPORT ANGLES
DETAIL J END SUPPORT ANGLE ATTACHMENT
COVER PLATES 29 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

C & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

NUMBERS AND LETTERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CO 201, CO 202 OR CD 230.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET

[illegible] MATERIAL PER PANEL				REF DRWG
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T36N	4	C32T36N – 57'-9	ST 236N
BRIDGING TRUSSES	T13	4	24T13 – 13'-3"	ST 213
3" x 2" x 1/4" ANGLE	A2	4	3" x 2" x 1/4" x 5'-11 9/16"	ST 403
	A4	5	3" x 2" x 1/4 x 13'-3"	ST 403
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-6"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	[illegible]	2	[illegible] x .0135" x 13'-11 1/2"	ST 303
	C	4	[illegible] x .0135" x 15'-2"	ST 303
	C	2	[illegible] x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-3 3/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1 1/4" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .50" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

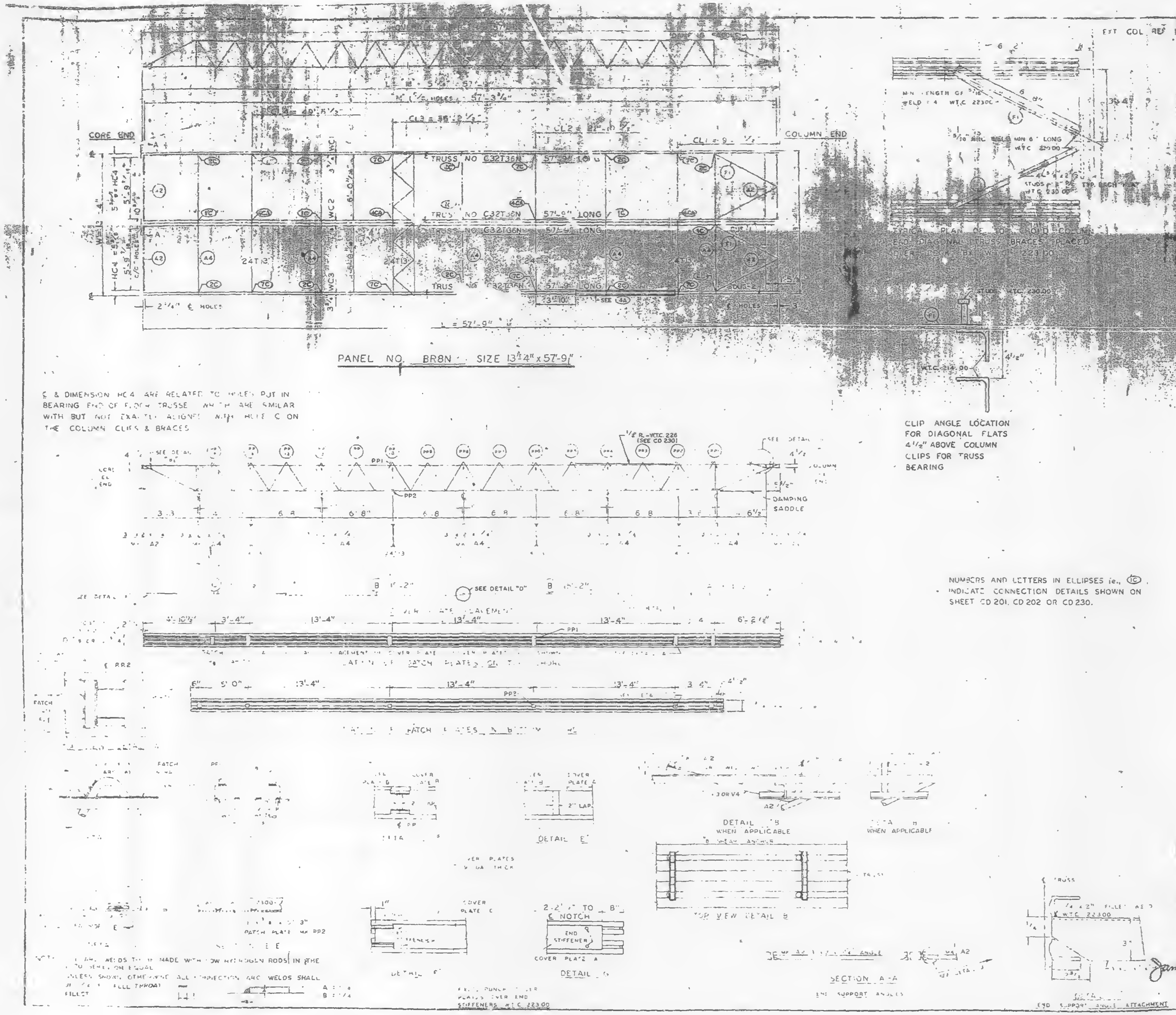
NO.	DATE	REVISION	BY

REF DRWG	
7-AB4-3	10-15-68
7-AB4-15,16,39 & 41	7-22-68
7-AB4-31	1-3-68
SA 24	1-6-69
7-AB3-34	1-6-69
7-AB1-32	1-6-69
7-AB4-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH ONLY)
PANEL B8N - 13'-4 x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-54	PLATE
APPROVED FOR FABRICATION James White FOR PONYA	DATE 4/7/69	DRAWN BY [illegible] DATE APRIL 1, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 1, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B8N



PANEL NO. BR8N SIZE 13'-4" x 57'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSE WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

TYPICAL PLAN OF DIAGONAL FLATS CONNECTING END DIAGONAL TRUSS BRACES PLACED OVER [illegible] W.T.C. 223.00

NUMBERS AND LETTERS IN ELLIPSES i.e., ⓉⒸ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 230.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET
A : [illegible]
B : [illegible]/4

DIAGONAL FLATS	F1	[illegible]	[illegible]	[illegible]
PATCH PLATES	PP1	[illegible]	[illegible]	400
	PP2	[illegible]	[illegible]	400
COVER PLATES	A	2	[illegible]	[illegible]
	B	24	[illegible]	[illegible]
	C	2	[illegible] DUS [illegible]	ST 400
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
SHEAR ANCHOR	SA2	[illegible]	8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x [illegible] x 3'-[illegible] 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x [illegible] x 3'-[illegible] 7/8"	ST298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

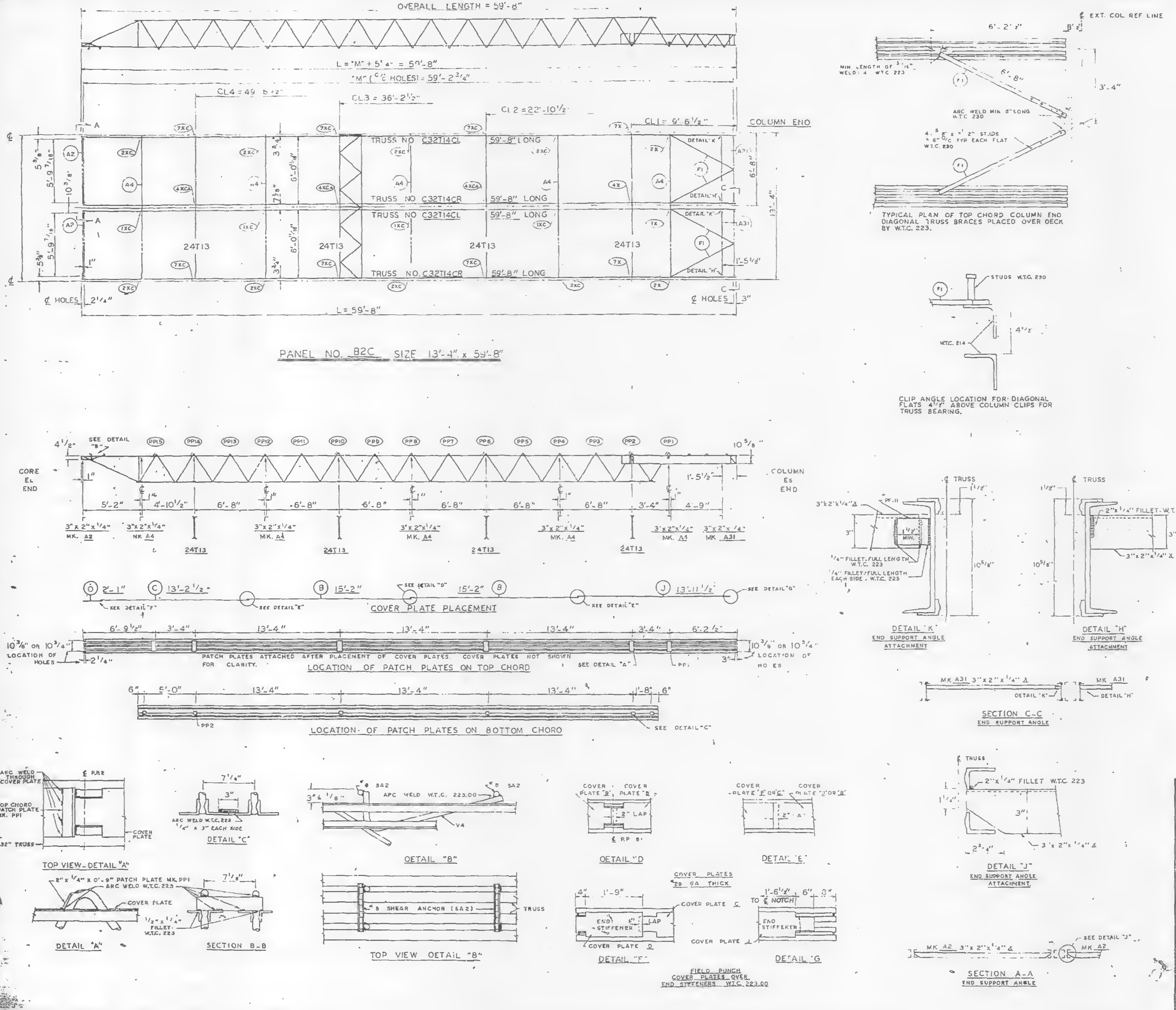
NO.	DATE	REVISION	BY

REF. DWG
[illegible] 3 — 10-15-68
[illegible] 5, 18, 39 & 41 — 7-22-68
[illegible] 3.1 — 1-3-68
[illegible] — 1-6-69
7-493 55 — 1-6-69
[illegible] 32 — 1-6-69
[illegible] 8 — 7-22-68

FLOOR PANEL DETAIL
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH ONLY)
PANEL BR8N 13'-4" x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-493-55 PLATE
APPROVED FOR FABRICATION BY James White FOR P.N.Y.A. DATE 4/22/69
DRAWN BY [illegible] DATE APRIL 1, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 1, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP BR8N


OVERALL LENGTH = 59'-8"
L = "M" + 5'4" = 59'-8"
"M" (C/C HOLES) = 59'-2 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO C32T14CL 59'-8" LONG
TRUSS NO C32T14CR 59'-8" LONG
24T13
DETAIL "K"
DETAIL "H"
℄ HOLES 2 1/4"
℄ HOLES 3"
L = 59'-8"
13'-4"
PANEL NO. B2C SIZE 13'-4" x 59'-8"
℄ EXT. COL REF LINE
6'-2 1/2"
3'-4"
6'-8"
MIN LENGTH OF 3" 1/4" WELD 4 W.T.C. 223
ARC WELD MIN 8" LONG W.T.C. 230
4-5/8" x 2" ST. UDS + 6" C/C TYP EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL "B"
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
CORE EL END
COLUMN ES END
5'-2" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-4" 4'-9"
3"x2"x1/4" MK. A2
3"x2"x1/4" MK A4
3"x2"x1/4" MK. A31
D 2'-1"
C 13'-2 1/2"
B 15'-2"
J 13'-11 1/2"
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "E"
SEE DETAIL "D"
SEE DETAIL "G"
6'-9 1/2" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"
10 3/8" OR 10 3/4" LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "A"
6" 5'-0" 13'-4" 13'-4" 13'-4" 1'-8" 6"
PP2
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
3"x2"x1/4"
1/4" FILLET FULL LENGTH W.T.C. 223
1/4" FILLET FULL LENGTH EACH SIDE W.T.C. 223
2"x1/4" FILLET W.T.C. 223
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK A31 3"x2"x1/4"
SECTION C-C END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223
1/4" x 3" EACH SIDE
DETAIL "C"
APC WELD W.T.C. 223.00
SA2
V4
DETAIL "B"
COVER PLATE "B"
COVER PLATE "C"
2" LAP
DETAIL "D"
COVER PLATE "D" OR "C"
COVER PLATE "J" OR "B"
DETAIL "E"
2"x1/4"x0'-9" PATCH PLATE MK. PP1
ARC WELD W.T.C. 223
1/2"x1/4" FILLET W.T.C. 223
DETAIL "A"
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW DETAIL "B"
COVER PLATES 20 GA THICK
END STIFFENER
LAP
COVER PLATE C
COVER PLATE D
DETAIL "F"
TO ℄ NOTCH
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
℄ TRUSS
2"x1/4" FILLET W.T.C. 223
3"x2"x1/4"
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
MK A2 3"x2"x1/4"
SEE DETAIL "J"
SECTION A-A END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-5"	ST 214CL
	T14CR	2	C32T14CR x 59'-5"	ST 214CL
BRIDGING TRUSSES	T13	4	24T13 x 13'-3"	ST 213
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 [illegible]	ST 403
	A4	5	3"x2"x1/4"x3'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-[illegible] 8"	ST 410
CLOSURE PLATES	PF-11	2	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-6"	ST 402
PATCH PLATES	PP1	12	2"x1/4" x 0'-9"	ST 400
	PP2	12	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x.0135" x 15'-2"	ST 303
	C	2	9"x.0135" x 13'-2 1/2"	ST 303
	D	2	9"x.0135" x 2'-1"	ST 303
	J	2	9"x.0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x1 1/2"x.25"x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	4	4 1/2"x.39"x 0'-9"	ST 400
	P3	4	4 1/2"x.39"x 1'-0"	ST 400
	P9	4	3"x 1/2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY

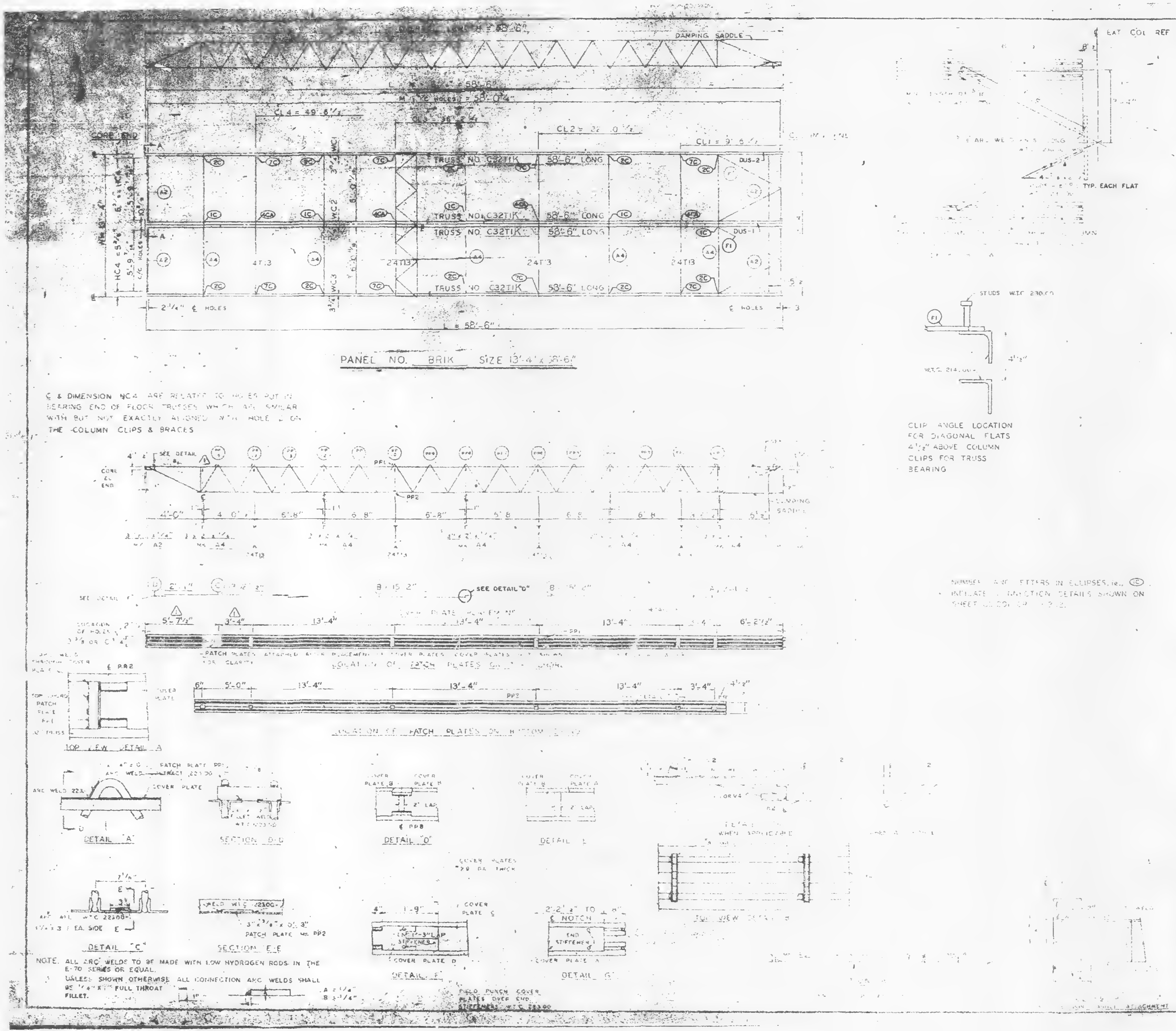
REF DRWG.		
	7-AB3-26	10-4-68
	7-AB1-13	10-4-68
	7-AB2-8	7-22-68
	7-AB4-28	7-22-68
	SA-124	10-11-68
	7-AB3-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL B2C - 13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-26
PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 6/6/69
DRAWN BY DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP B2C



℄ & DIMENSION NC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE 2 ON THE COLUMN CLIPS & BRACES

NUMBERS AND LETTERS IN ELLIPSES, i.e., ② INDICATE CONNECTION DETAILS SHOWN ON SHEET

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL				
MATERIAL	MK	REQ	[illegible]	[illegible]
FLOOR TRUSSES	T1K	4	[illegible]	[illegible]
BRIDGING TRUSSES	T13	4	24T13 [illegible]	[illegible]
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4" [illegible]	[illegible]
	A4	[illegible]	[illegible]	[illegible]
DIAGONAL FLATS	F1	4	1 1/2" [illegible]	[illegible]
PATCH PLATES	PP1	12	2"x3/4" [illegible]	[illegible]
	PP2	12	3"x [illegible]	ST 400
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST 303
	B	4	9" x .0135" x 13'-2"	ST 303
	C	2	9 x .0135" x 13'-2 1/2"	ST 303
	D	2	9" x .013 " x [illegible]	ST 303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-4"	ST 400
#6 SHEAR ANCHOR	SA2	5	#6 REBAR [illegible]	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST 298
	DUS-2	1	3 1/2"x3 1/2"x3/8"x3'-8 7/8"	ST 498
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

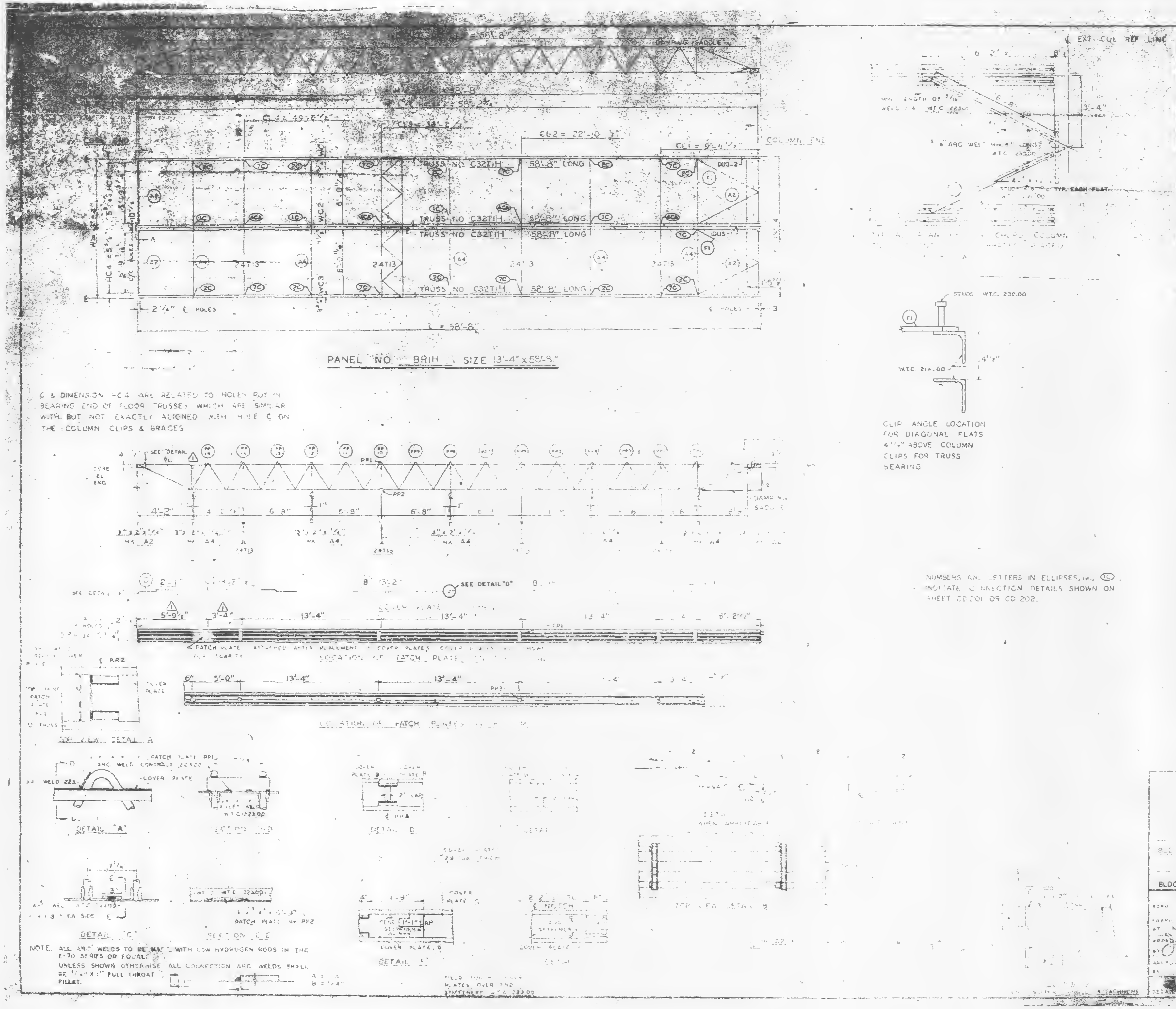
NO.	DATE	REVISION	BY
⚠1	6-5-69	AS NOTED	R.I.P.

REF DRWG		
	7-AB4-3	10-15-68
	7-AB4-15	7-22-68
⚠1	7-AB4-42	10-6-68
	SA 24	1-6-69
	7-AB4-2	1-3-68
	7-AH1-2	7-22-68
	7-AB2-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 45(N) + 45-46(S)
PANEL BRIK
BLDG B FLOOR 46 (EAST & WEST) 45 (EAST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION DATE
BY [illegible] BONYA 1/8/70
APPROVED FOR FABRICATION DATE
DESIGN DRAWING No. 7-AB3
DRAWN BY
DATE 10-22-68
CHECKED BY T.M. CHURA
IN CHARGE
BRIK



PANEL NO. BRIH SIZE 13'-4" x 58'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL

MATERIAL	MK	PCS	[illegible]	[illegible]
FLOOR TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
3" x 2" x 1/4" ANGLE	A2	[illegible]	[illegible]	[illegible]
	A4	8	[illegible]	[illegible]
DIAGONAL FLATS	F1	[illegible]	[illegible]	[illegible]
PATCH PLATES	PP1	12	[illegible]	ST 400
	PP2	12	3" x [illegible]	ST 400
COVER PLATES	A	[illegible]	[illegible]	[illegible]
	B	4	9" x [illegible]	ST 303
	C	2	9" x .0355" x 13'-2"	ST 303
	D	2	9" x .0355" x [illegible]	ST 303
ANGLE CLIPS	C	16	2" x 1 1/2" x 1/4" x 0'-[illegible]	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x [illegible]	ST 400
DAMPING SADDLE	DUS-1	1	[illegible]	[illegible]
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-8 1/2"	ST 290
CONNECTION BAR	CB1	4	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

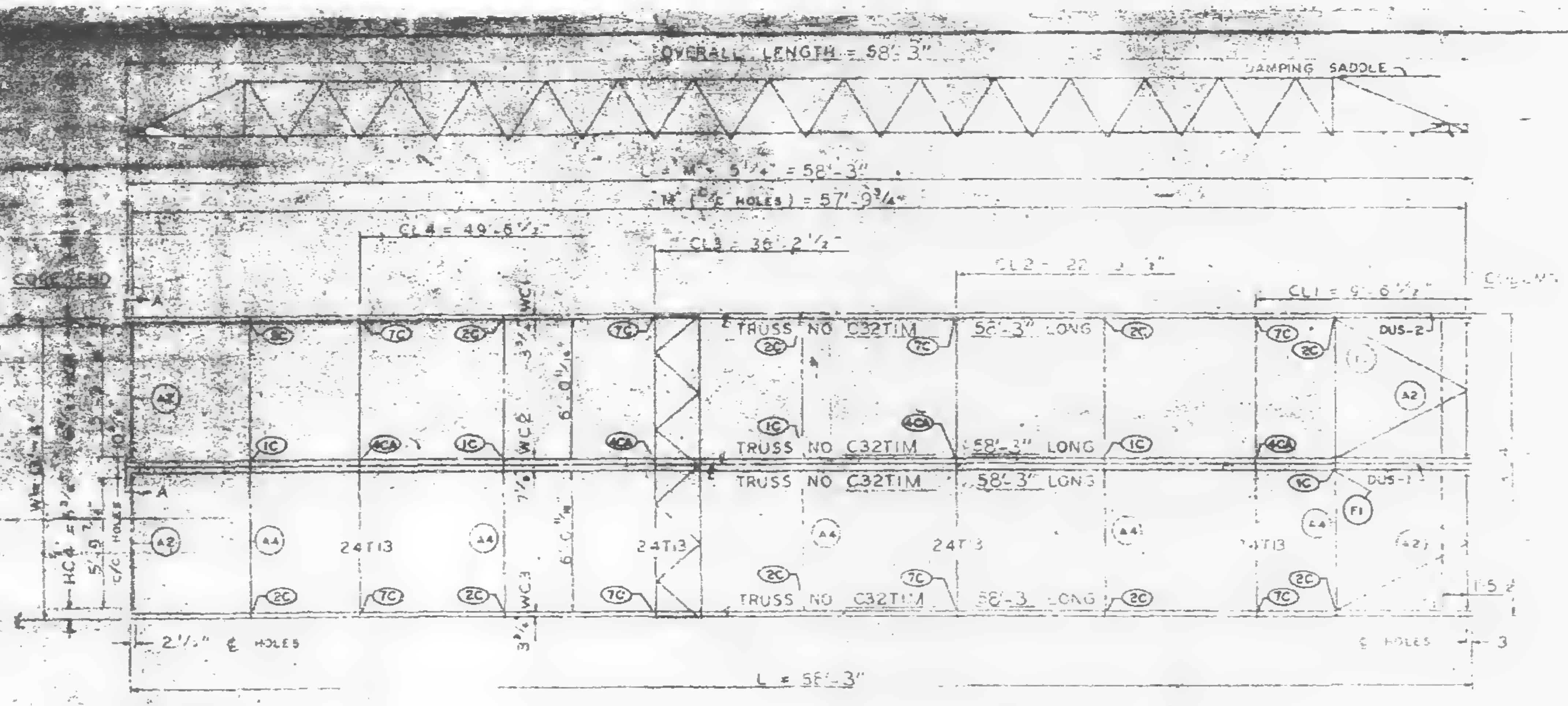
NO.	DATE	REVISION	BY
1	6-5-69	AS NOTED	R.J.P.

REF DRWG
7-AB4-3 10-15-68
7-AB4-15,16 1-22-68
7-AB4-42 10-15-68
SA-124 1-6-69
7-AB3-2 3-68
7-AB1-2 7-22-68
7-AB2-8 7-22-68

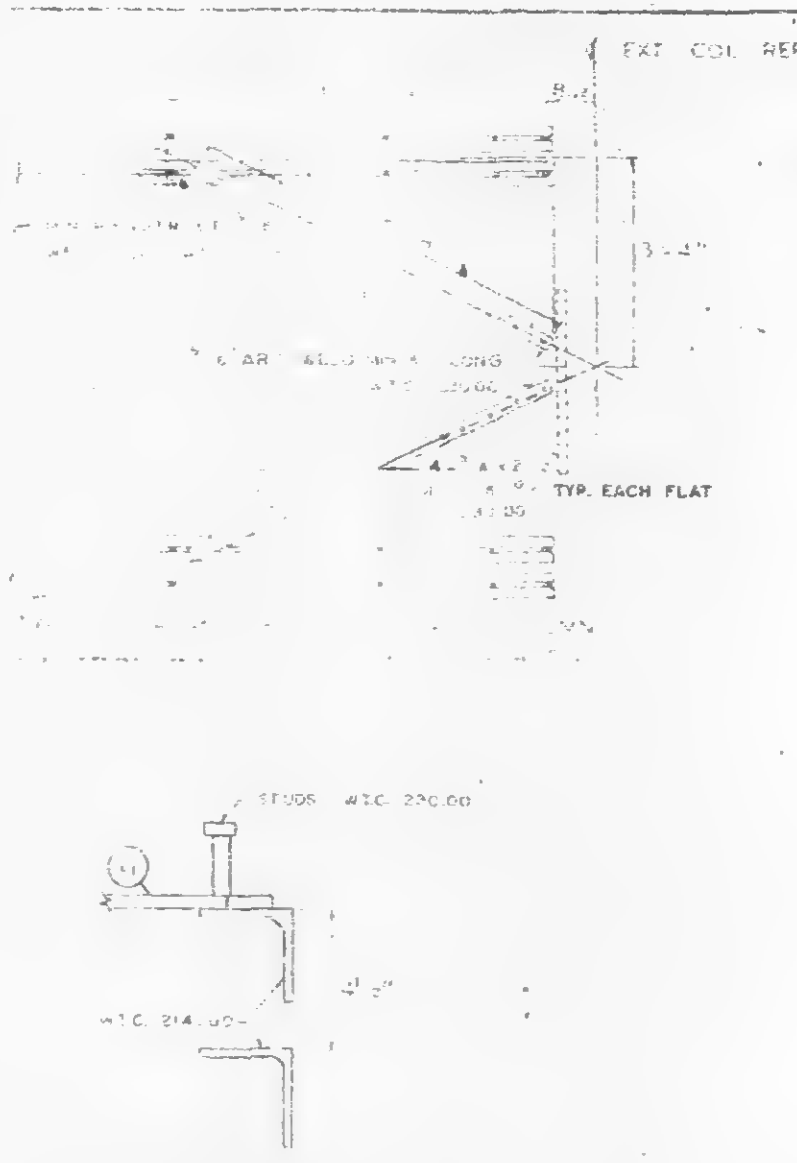
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 1 FLOORS 79-80(N)
PANEL BRIH - 13'-4" x 58'-8"
BLDG. 8 FLOORS 79-80 (WEST) 1

LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] DATE 1/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY A.C. WEBER
DESIGN DRAWING NO. 7-AB3-6
DRAWN BY [illegible] DATE 10-22-68
CHECKED BY [illegible] DATE 10-22-68
FABRICATION [illegible]
PLATE
BRIH



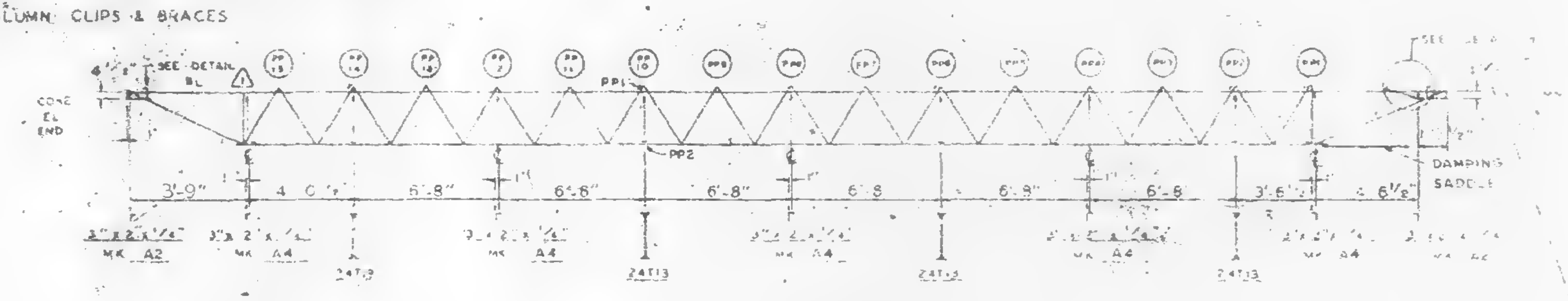
PANEL NO. BRIM SIZE 13'-4" x 58'-3"



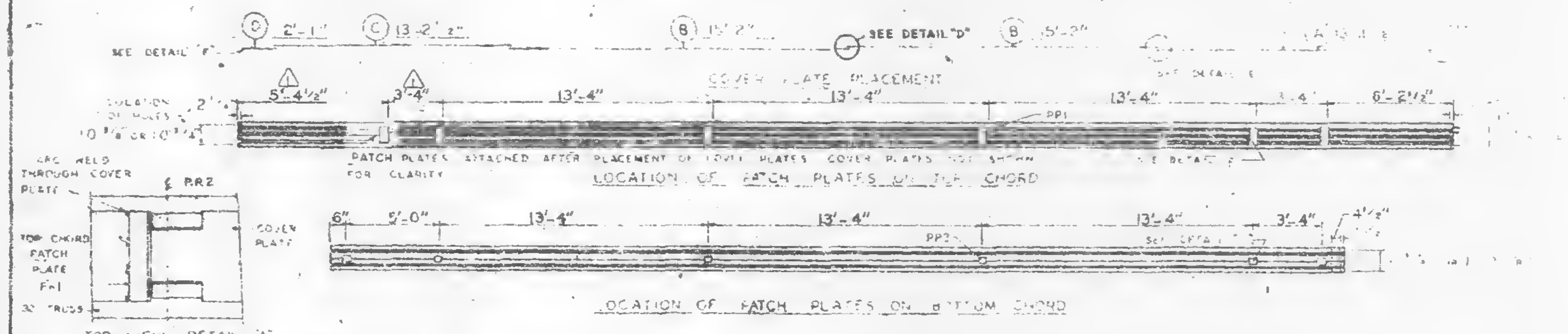
CLIP ANGLE LOCATION
FOR DIAGONAL FLATS
4 1/2" ABOVE COLUMN
CLIPS FOR TRUSS
BEARING

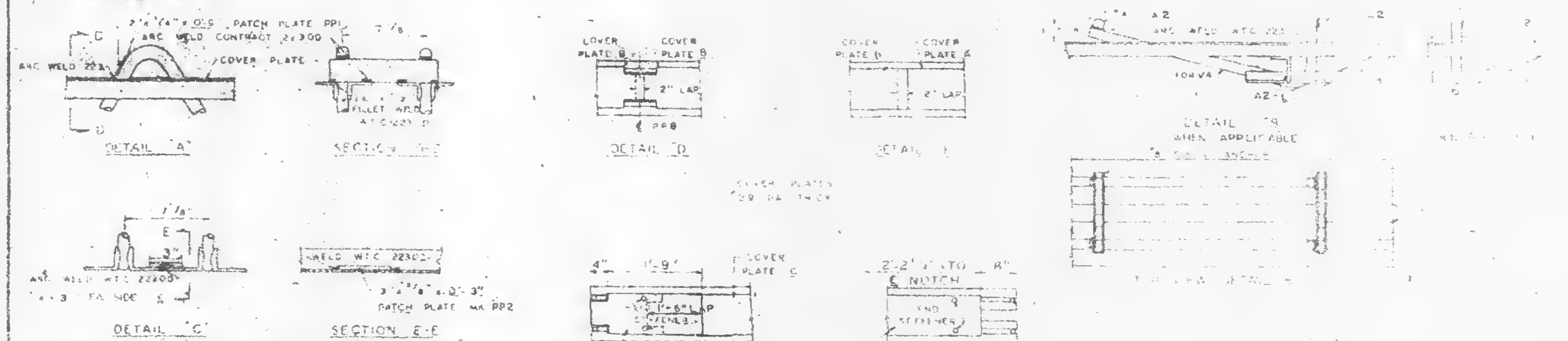
REQUIRED MATERIAL PER				
MATERIAL	MK	PCS	[illegible]	[illegible]
FLOOR TRUSSES	T1M	4	C32T1M [illegible]	[illegible]
BRIDGING TRUSSES	T13	4	24T13 [illegible]	[illegible]
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4" [illegible]	ST 403
	A4	5	3"x2"x1/4" [illegible]	[illegible]
DIAGONAL FLATS	F1	4	1 1/2"x5/8" [illegible]	[illegible]
PATCH PLATES	PP1	12	2" [illegible]	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
[illegible] PLATES	A	2	9"x.0135"x[illegible]	[illegible]
	B	4	9"x.0135"x13'-2"	ST 303
	C	2	9"x.0135"x13'-2 1/2"	ST 303
	D	2	9"x.0135"x2'-1"	ST 303
ANGLE CLIPS	C1	16	2"x1 1/2"x1/4"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x3/8"x3'-6 1/2"	[illegible]
	DUS-2	1	3 1/2"x3 1/2"x3/8"x3'-6 1/2"	ST 298
CONNECTION BAR	CB1	4	1"⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	8	4 1/2" x .30" x 0'-9"	ST 200
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



NUMBERS AND LETTERS IN ELLIPSES, ie., ⓘⒸ,
INDICATE CONNECTION DETAILS SHOWN ON
SHEET CD 201 OR CD 202.


SEE DETAIL "F"
2'-1"
13'-2 1/2"
13'-2"
15'-2"
SEE DETAIL "D"
COVER PLATE PLACEMENT
5'-4 1/2"
3'-4"
13'-4"
6'-2 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
ARC WELD THROUGH COVER PLATE
℄ P.P.2
TOP CHORD PATCH PLATE
COVER PLATE
6"
5'-0"
4 1/2"
PP2
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL "A"



NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4
B = 1/4"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 22300

1	6-5-69	AS NOTED	2.12
NO.	DATE	REVISION	BY

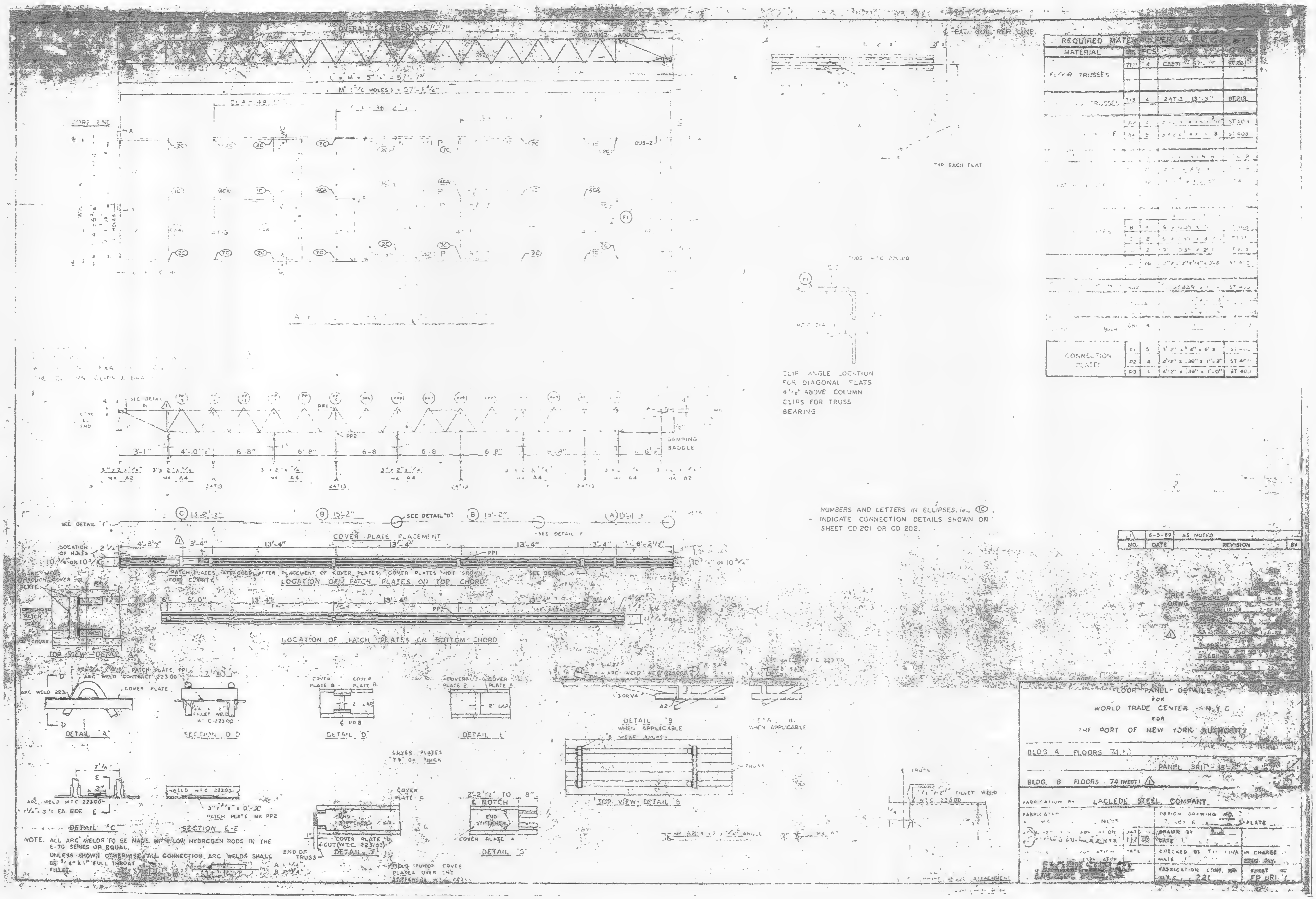
⚠1 REF. DRWG

7-AB4-5	10-15-68
7-AB4-15-16	7-22-60
7-AB4-12	10-15-68
SA-424	1-6-60
7-AB3-2	1-9-68
7-AB1-2	7-22-68
7-AB3-19	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 72-73 NO
PANEL BRIM 13'-4" x 58'-3"
BLDG B FLOORS 72-73 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-[illegible]
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
DRAWN BY [illegible] DATE 1-2-69
APPROVED FOR FABRICATION DATE
CHECKED BY [illegible] DATE 10-22-[illegible]
DETAILED BY [illegible]
FABRICATION [illegible]
[illegible] 9RI



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	[illegible]	[illegible]
FLOOR TRUSSES	T1	4	C32T1 57'-7"	ST 201
TRUSSES	T13	4	24T13 13'-3"	ST 213
	A2	[illegible]	[illegible]	ST 403
E	A4	5	[illegible] 3	ST 403
	B	4	[illegible]	[illegible]
	[illegible]	2	[illegible] 3	[illegible]
	[illegible]	2	[illegible] 2'	[illegible]
	[illegible]	16	2" x 2" x 1/4" x 2'-6	ST 400
	[illegible]	[illegible]	BAR	[illegible]
BAR	CS	4	[illegible]	[illegible]
CONNECTION PLATES	P1	5	3'-2" x 3/8" x 6'-2"	ST 400
	P2	4	4 1/2" x .30" x 1'-0"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" X 1" FULL THROAT FILLET.

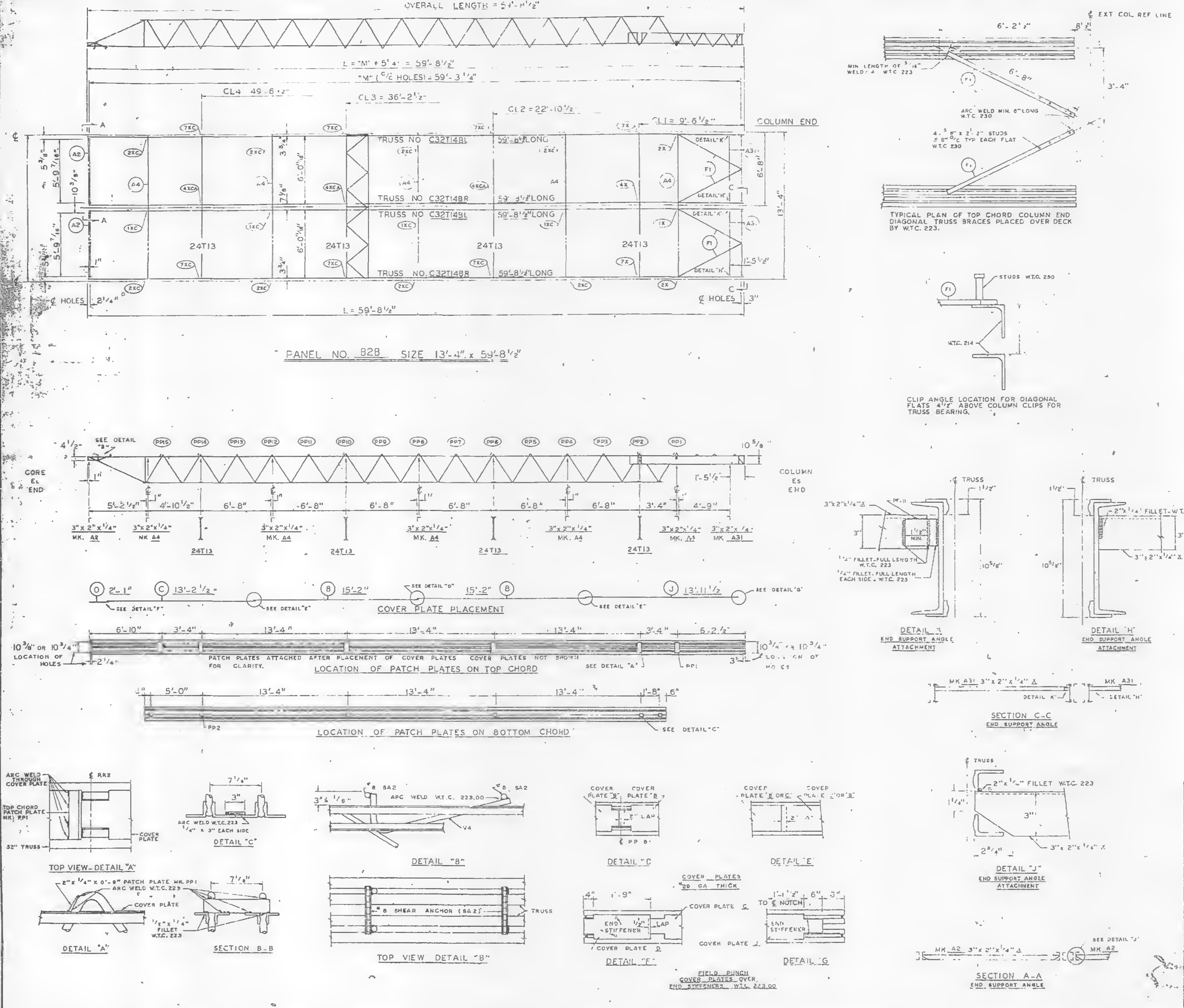
NO.	DATE	REVISION	BY
1	6-5-69	AS NOTED	

REF. DRWG.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

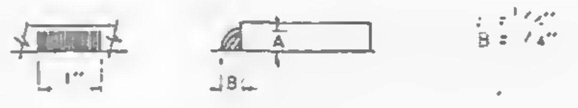
BLDG A FLOORS 74 (N)
PANEL BRI 13'-4"
BLDG. B FLOORS 74 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
DESIGN DRAWING NO. PLATE
DRAWN BY
CHECKED BY
IN CHARGE
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP BRI


OVERALL LENGTH = 5'4"-8 1/2"
L = "M" + 5'4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-3 1/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14BL 59'-8 1/2" LONG
TRUSS NO. C32T14BR 59'-8 1/2" LONG
TRUSS NO. C32T14BL 59'-8 1/2" LONG
TRUSS NO. C32T14BR 59'-8 1/2" LONG
24T13
DETAIL "K"
DETAIL "H"
13'-4"
6'-8"
L = 59'-8 1/2"
℄ HOLES 2 1/4"
℄ HOLES 3"
PANEL NO. B2B SIZE 13'-4" x 59'-8 1/2"
CORE EL END
COLUMN ES END
3"x2"x1/4" MK. A2
3"x2"x1/4" MK. A4
3"x2"x1/4" MK. A31
24T13
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "E"
SEE DETAIL "D"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
10 3/8" OR 10 3/4" LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
℄ EXT COL REF LINE
MIN. LENGTH OF 5/16" WELD 4" W.T.C. 223
ARC WELD MIN. 6" LONG W.T.C. 230
4-5/8" x 2'-2" STUDS 3 6" C/C TYP EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
℄ TRUSS
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET-W.T.C. 223
3"x2"x1/4" ∠
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK A31 3"x2"x1/4" ∠
SECTION C-C END SUPPORT ANGLE
2"x1/4" FILLET W.T.C. 223
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
MK A2 3"x2"x1/4" ∠
SEE DETAIL "J"
SECTION A-A END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
2"x1/4" x 0'-9" PATCH PLATE MK. PP1
ARC WELD W.T.C. 223
DETAIL "A"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
DETAIL "C"
1/4" x 1/4" FILLET W.T.C. 223
SECTION B-B
#8 SA2
ARC WELD W.T.C. 223.00
DETAIL "8"
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW DETAIL "B"
COVER PLATE "B"
COVER PLATE "B"
DETAIL "D"
DETAIL "E"
COVER PLATES 20 GA THICK
END STIFFENER
LAP
COVER PLATE C
COVER PLATE D
COVER PLATE J
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T14BL	2	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	2	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T13	4	24T13 x 13'-3"	BT 213
3"x2"x1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 9/16"	ST 403
	A4	5	[illegible]	ST 403
	A31	2	[illegible]	ST 410
CLOSURE PLATES		2	[illegible]	[illegible]
DIAGONAL FLATS	F	4	2"x5/8"x6'-8"	ST 402
PATCH PLATES	PP1		2"x1/4"x0'-9"	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
COVER PLATES	B	4	9"x.0135"x15'-2"	ST 303
	C	2	9"x.0135"x13'-2 1/2"	ST 303
	D	2	9"x.0135"x2'-1"	ST 303
	J	2	9"x.0135"x13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x1 1/2"x.25"x6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3"x3/8"x0'-6 1/2"	ST 400
	P2	4	4 1/2"x.39"x0'-9"	ST 400
	P3	4	4 1/2"x.39"x1'-0"	ST 400
	P9	4	3"x1/2"x1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.



NO.	DATE	REVISION	BY

REF. DRWG.

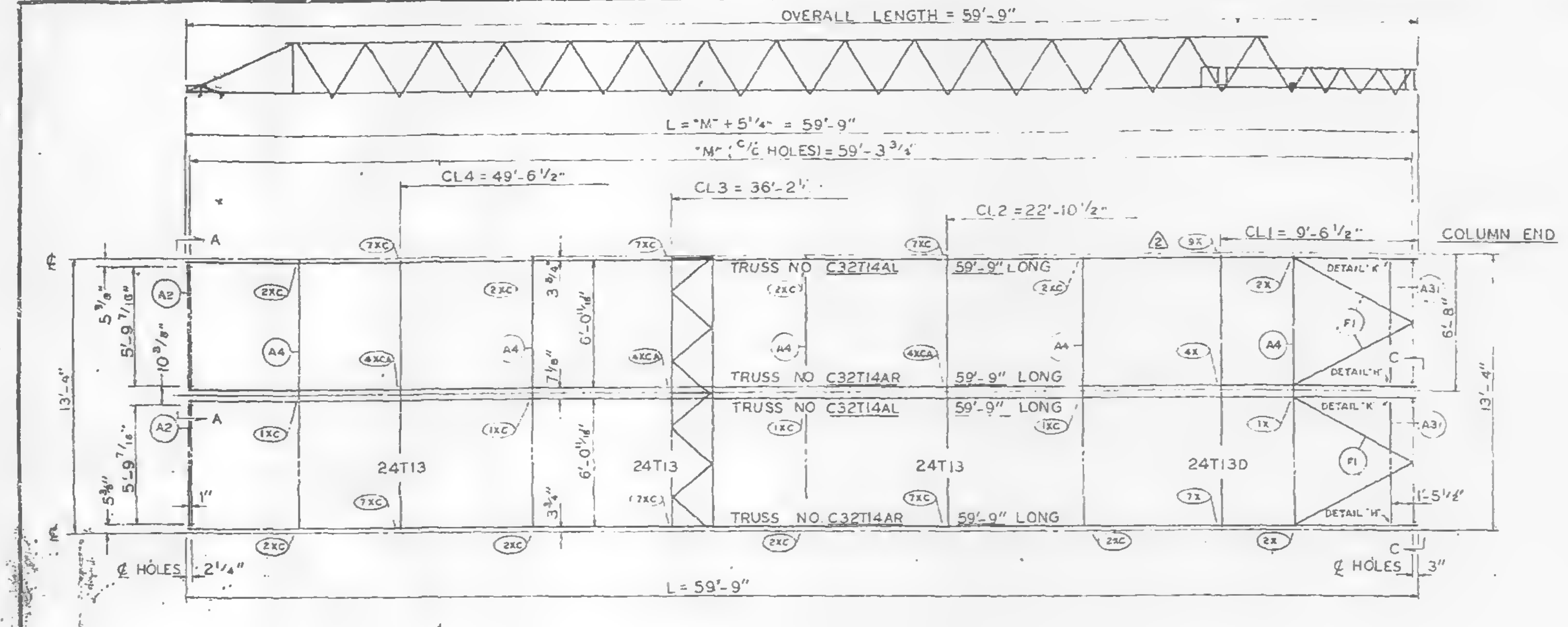
7-AB3-25	10-4-68
7-AB1-13	10-4-68
7-AB2-6	7-22-68
7-AB4-2B	7-22-68
SA-124	10-11-68
7-AB3-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

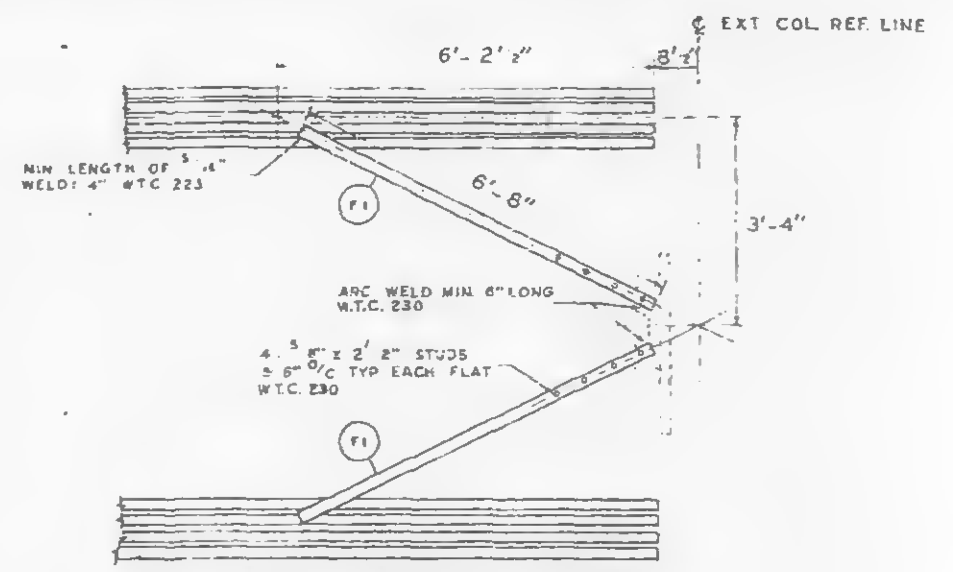
BLDG. A FLOORS 92 (NORTH)

PANEL B28 - 13'-4" x 59'-8 1/2"

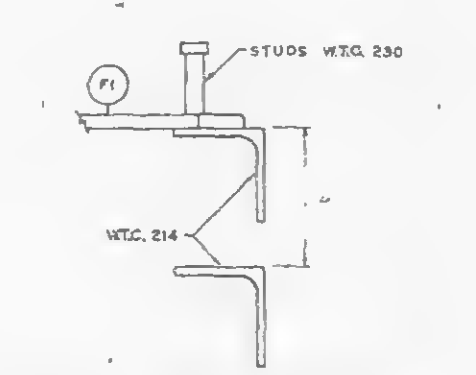
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-26
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 6/6/69
DRAWN BY Luck DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
LACLEDE STEEL CO.
CHECKED BY T.N. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP B28



PANEL NO. BR2A SIZE 13'-4" x 59'-9"


6'-2 3/4"
EXT COL REF LINE
MIN LENGTH OF WELD: 4" WTC 223
6'-8"
3'-4"
ARC WELD MIN 6" LONG W.T.C. 230
STUDS TYP EACH FLAT W.T.C. 230
F1

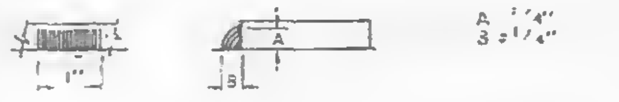
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

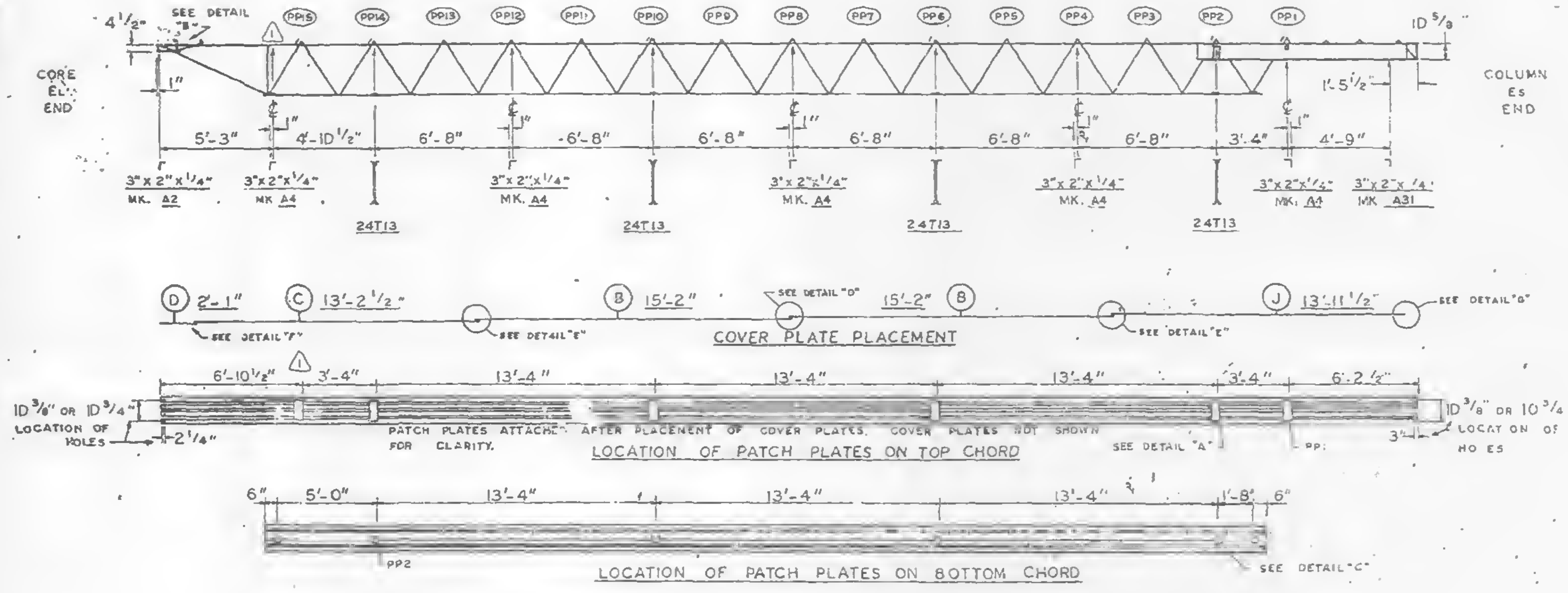


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T14AL	2	C32T14AL x 59'-9"	ST 214AL
	T14AR	2	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T13		24T13 x 13'-3"	BT 213
	T13D	1	24T13D x 13'-3"	BT 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x 2"x 1/4" x 5'-11 9/16"	ST 403
	A4	5	3"x 2"x 1/4" x 13'-3"	ST 403
	A31	2	3"x 2"x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 3/8"	ST 4 2
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/2"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x 1 1/2"x .25"x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
CONNECTION PLATES ⚠2	P1	4	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	3	4 1/2"x .39"x 0'-9"	ST 400
	P3	3	4 1/2"x .39"x 1'-0"	ST 400
	P9	4	3"x 1/2"x 1'-2"	ST 409
	P10	1	4 1/2"x .39"x 0'-5"	ST 409
	P11	1	3"x 1/4"x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie, (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 215 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

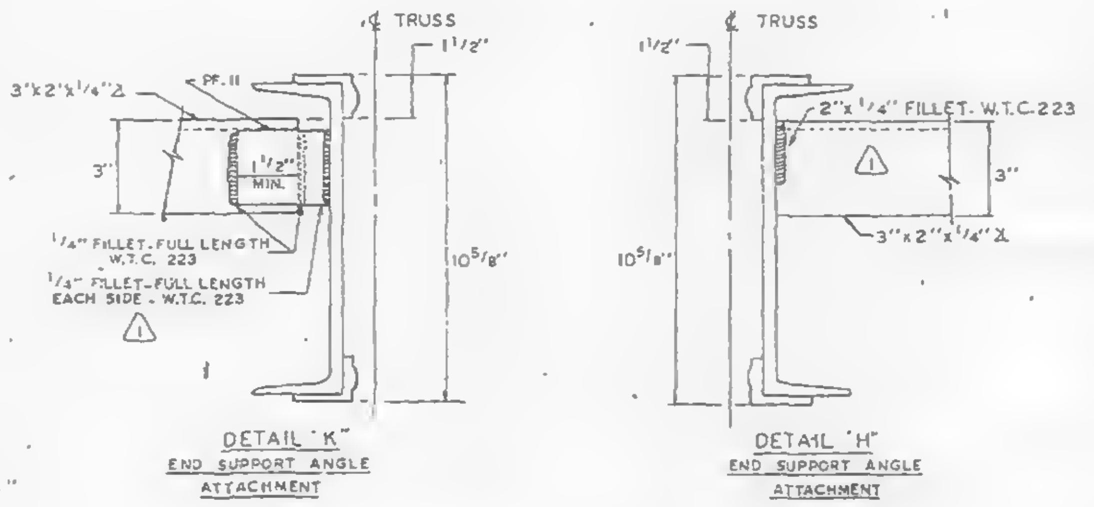




COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

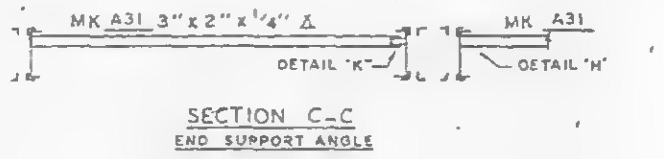
LOCATION OF PATCH PLATES ON BOTTOM CHORD


TRUSS
3"x 2"x 1/4" ∠
PF-11
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
2"x 1/4" FILLET W.T.C. 223
10 5/8"
3"
3"x 2"x 1/4" ∠

DETAIL "K"
END SUPPORT ANGLE ATTACHMENT

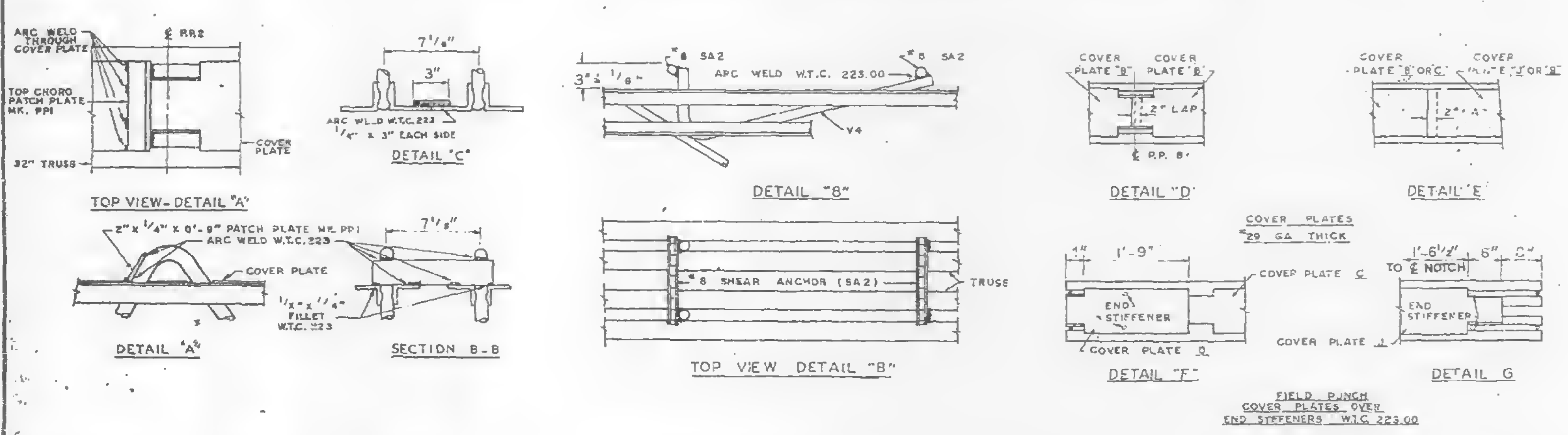
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

2	5-12-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.
NO.	DATE	REVISION	BY



SECTION C-C
END SUPPORT ANGLE

REF DRWG.	
7-A83-27	10-4-68
7-A81-13	10-4-68
7-A82-8	7-22-68
7-A84-28	7-22-68
SA-124	10-11-68
7-A83-24	8-15-68



TOP VIEW - DETAIL "A"

DETAIL "C"

DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "A"

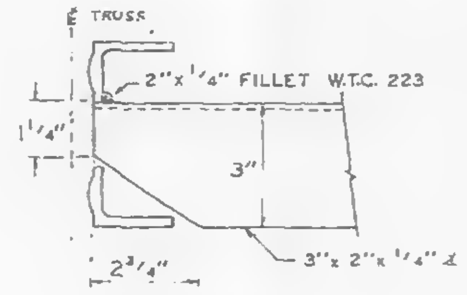
SECTION B-B

TOP VIEW DETAIL "B"

DETAIL "F"

DETAIL G

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



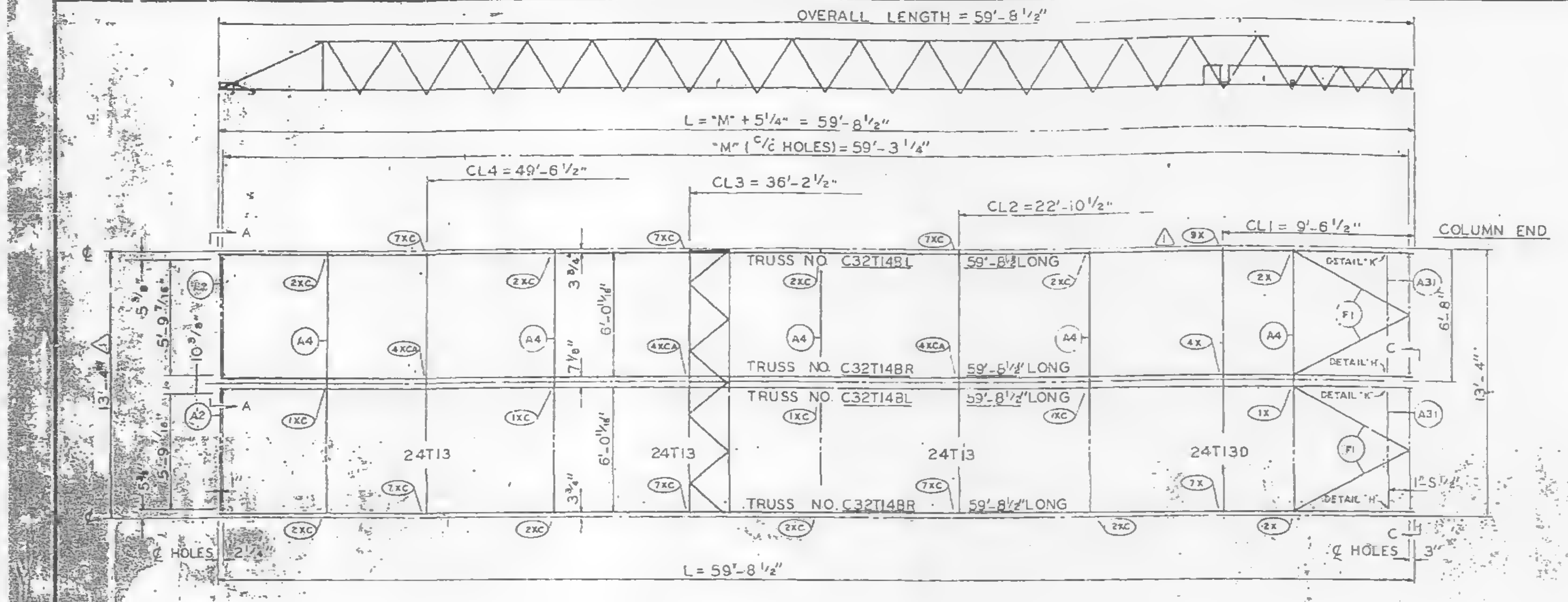
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

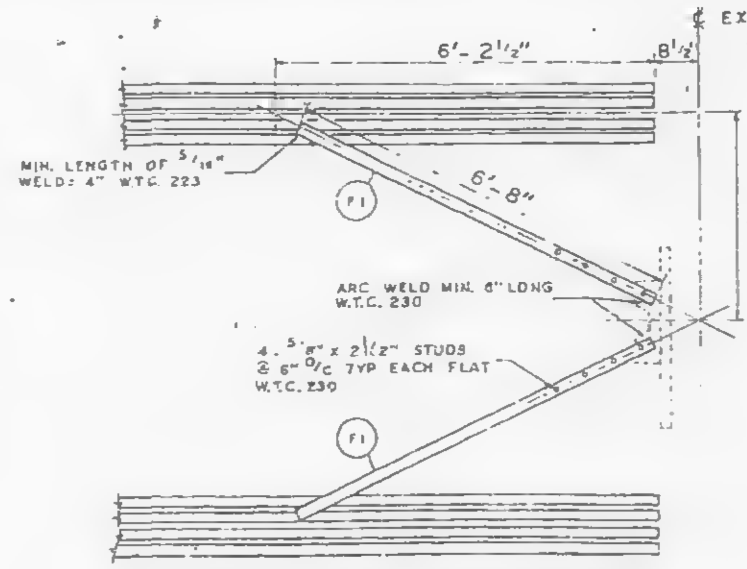
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL BR2A-13'-4" x 59'-9" ⚠1

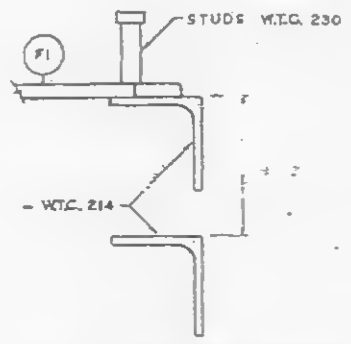
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-27	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE 6/6/69	DRAWN BY ____ DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP BR2A



PANEL NO. BR2B SIZE 13'-4" x 59'-8½"


℄ EXT. COL. REF. LINE
6'-2½"
8½"
6'-8"
3'-4"
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
F1
ARC WELD MIN. 6" LONG W.T.C. 230
4 - ⅝" x 2½" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230

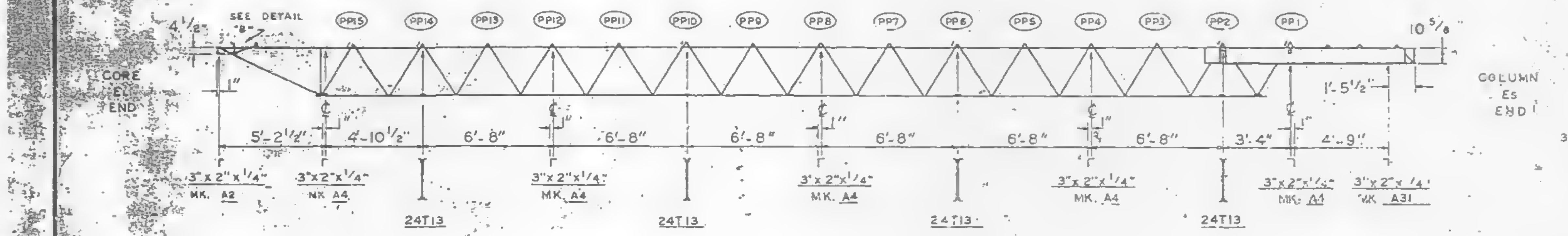
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

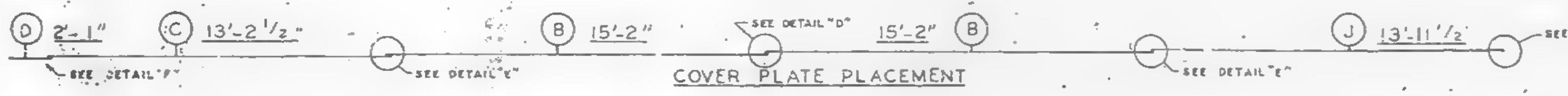


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

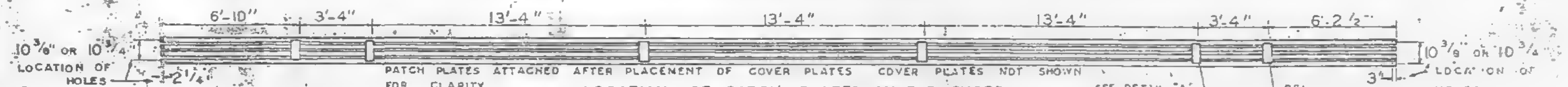
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14BL	2	C32T14BL x 59'-8½"	ST 214BL
	T14BR	2	C32T14BR x 59'-8½"	ST 214BL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	BT 213
	T130	1	24T130 x 13'-3"	BT 213D
3"x 2"x ¼" ANGLE	A2	2	3"x 2"x ¼"x 5'-11⁹⁄₁₆"	ST 403
	A4	5	3"x2"x ¼"x 13'-3"	ST 403
	A31	2	3"x 2"x ¼"x 5'-8⅛"	ST 410
CLOSURE PLATES	PF.11	2	3"x ¼" x 0'-2⅜"	ST 412
DIAGONAL FLATS	F1	4	1½" x ⅝" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2"x ¼" x 0'-9"	ST 400
	PP2	12	3"x ⅜" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2½"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11½"	ST 304
ANGLE CLIPS	C1	16	2"x 1½"x .25"x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES ⚠1	P1	4	3½"x ⅜"x 0'-6½"	ST 400
	P2	4	4½"x .39"x 0'-9"	ST 400
	P3	4	4½"x .39"x 1'-0"	ST 400
	P9	4	3"x ½"x 1'-2"	ST 409
	P10	1	4½"x .39"x 0'-5"	ST 409
	P11	1	3"x ¼"x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CO 210 THRU CO 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x ¼" FULL THROAT FILLET.

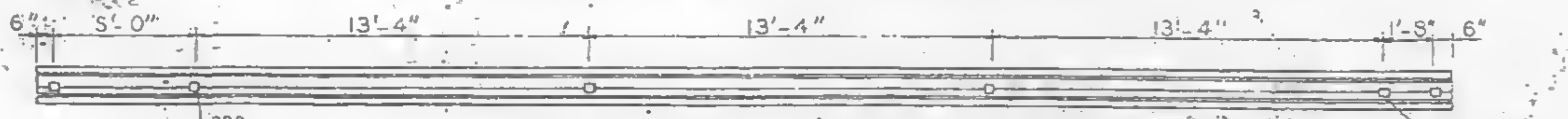




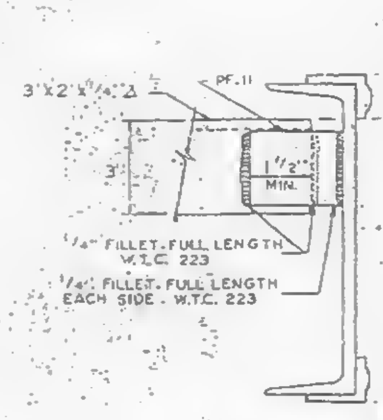
COVER PLATE PLACEMENT


6'-10"
3'-4"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2½"
10⅜" OR 10¾" LOCATION OF HOLES
2¼"
3"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY.
SEE DETAIL "A"
PP1

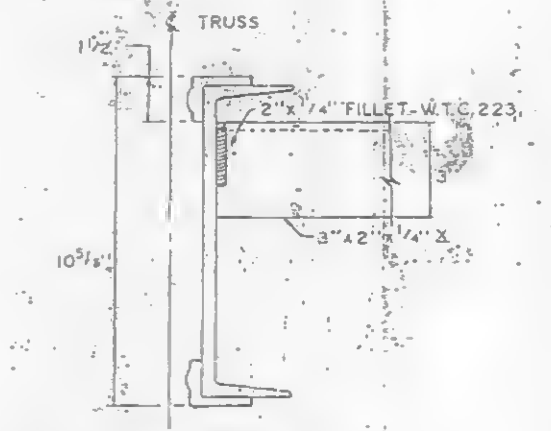
LOCATION OF PATCH PLATES ON TOP CHORD



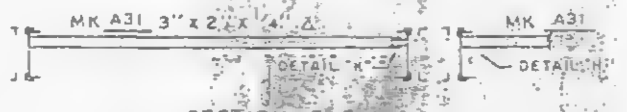
LOCATION OF PATCH PLATES ON BOTTOM CHORD


℄ TRUSS
1½"
3'x2'x¼" ∡
PF.11
3"
1½" MIN.
¼" FILLET-FULL LENGTH W.T.C. 223
¼" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
10⅝"

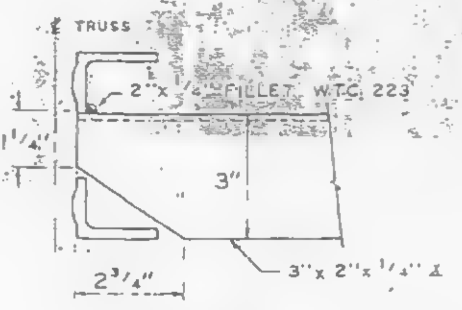
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



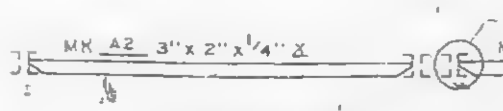
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



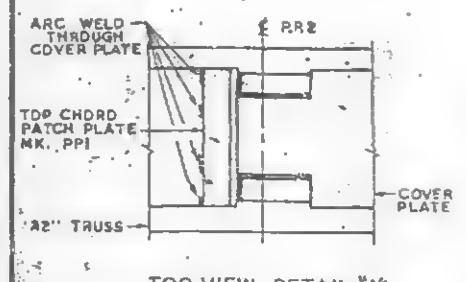
SECTION C-C
END SUPPORT ANGLE



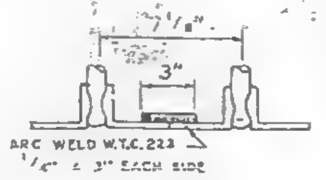
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



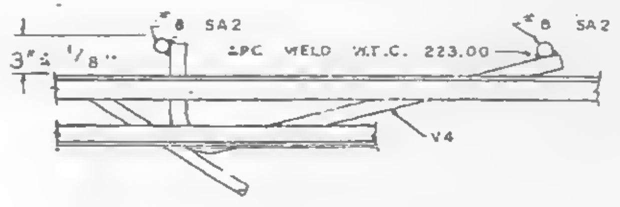
SECTION A-A
END SUPPORT ANGLE



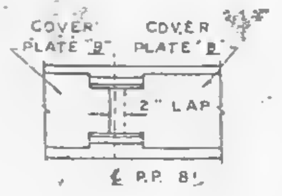
TOP VIEW - DETAIL "A"



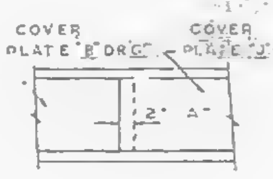
DETAIL "C"



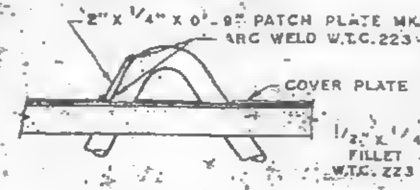
DETAIL "B"



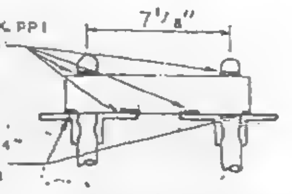
DETAIL "D"



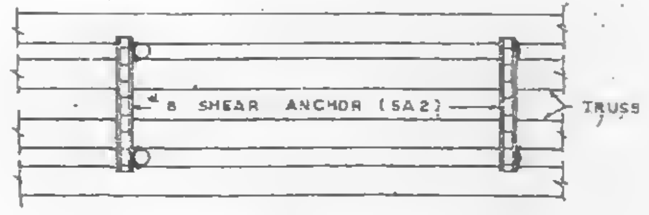
DETAIL "E"



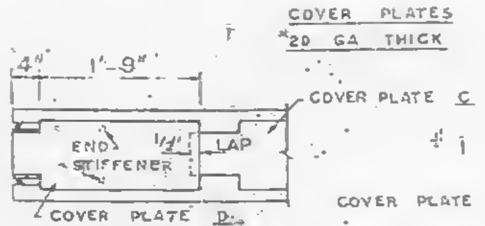
DETAIL "A"



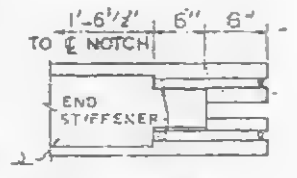
SECTION B-B



TOP VIEW DETAIL "B"

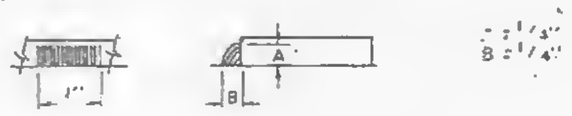


DETAIL "F"



DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



1	5-12-69	AS NOTED	G.D.C.
NO.	DATE	REVISION	BY

REF. DRWG.		
	7-A83-27	10-4-68
	7-A81-13	10-4-68
	7-A82-8	7-22-66
	7-A84-28	7-22-68
	SA-124	10-11-68
	7-A83-24	8-15-68

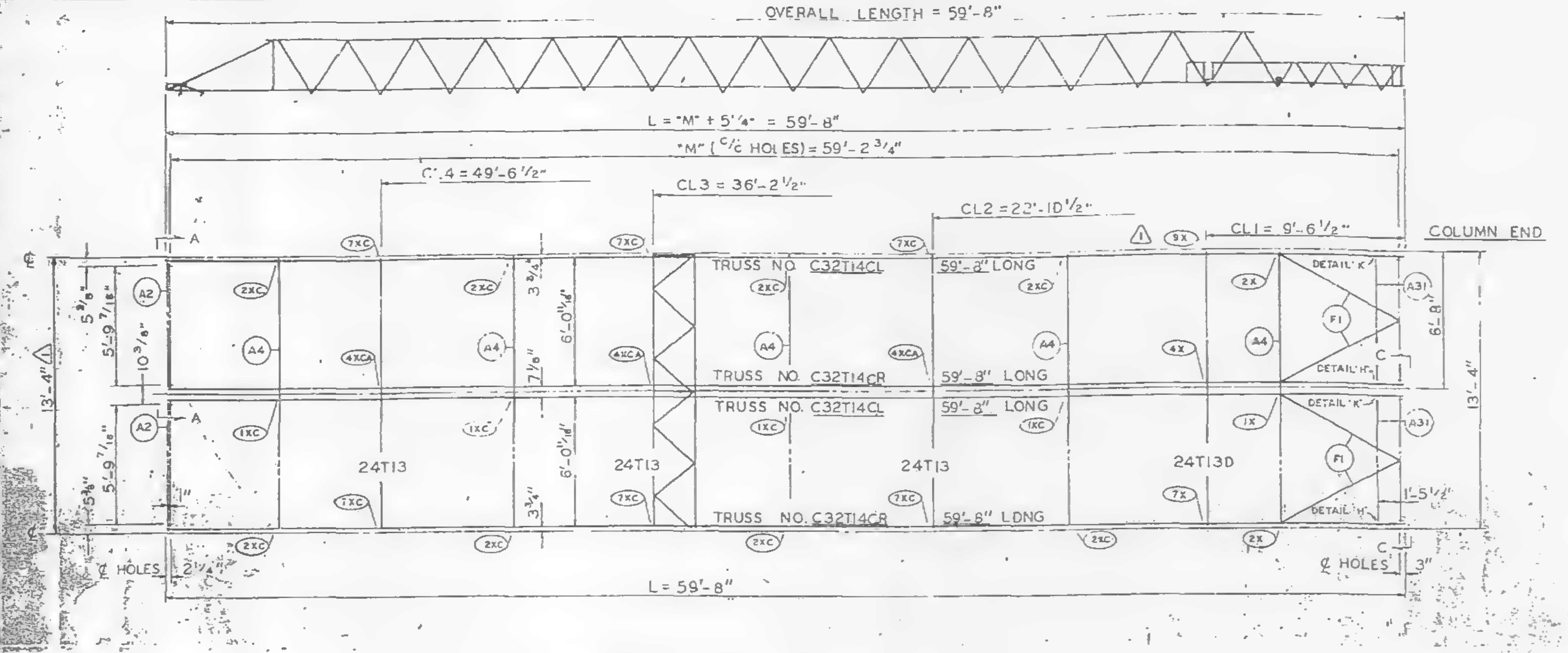
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

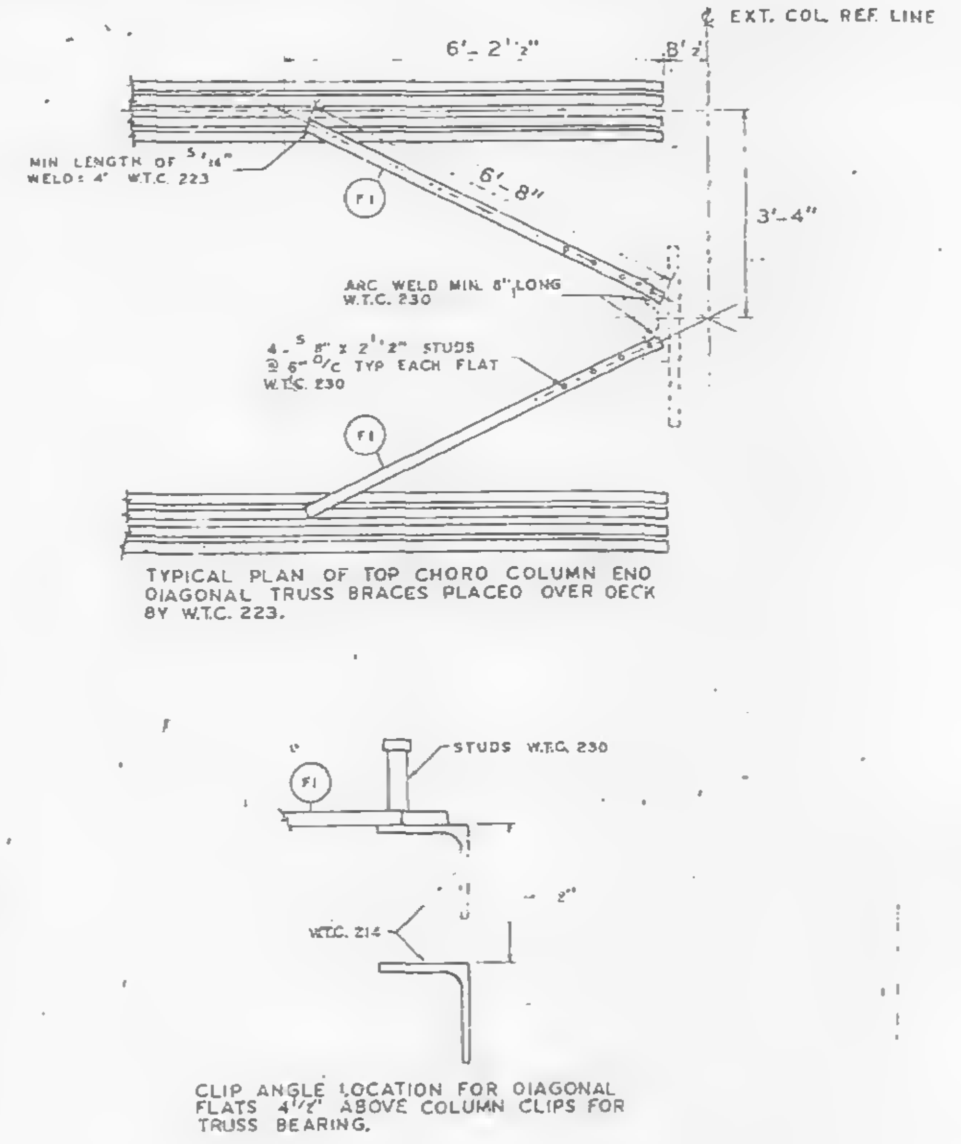
PANEL BR2B-13'-4" x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-27	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 6/6/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP BR2B


OVERALL LENGTH = 59'-8"
L = "M" + 5'1/4" = 59'-8"
"M" (C/C HOLES) = 59'-2 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 23'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14CL 59'-8" LONG
TRUSS NO. C32T14CR 59'-8" LONG
TRUSS NO. C32T14CL 59'-8" LONG
TRUSS NO. C32T14CR 59'-8" LONG
24T13
24T13
24T13
24T13D
DETAIL "K"
DETAIL "H"
13'-4"
6'-8"
L = 59'-8"
℄ HOLES
℄ HOLES

PANEL NO. BR2C SIZE 13'-4" x 59'-8"

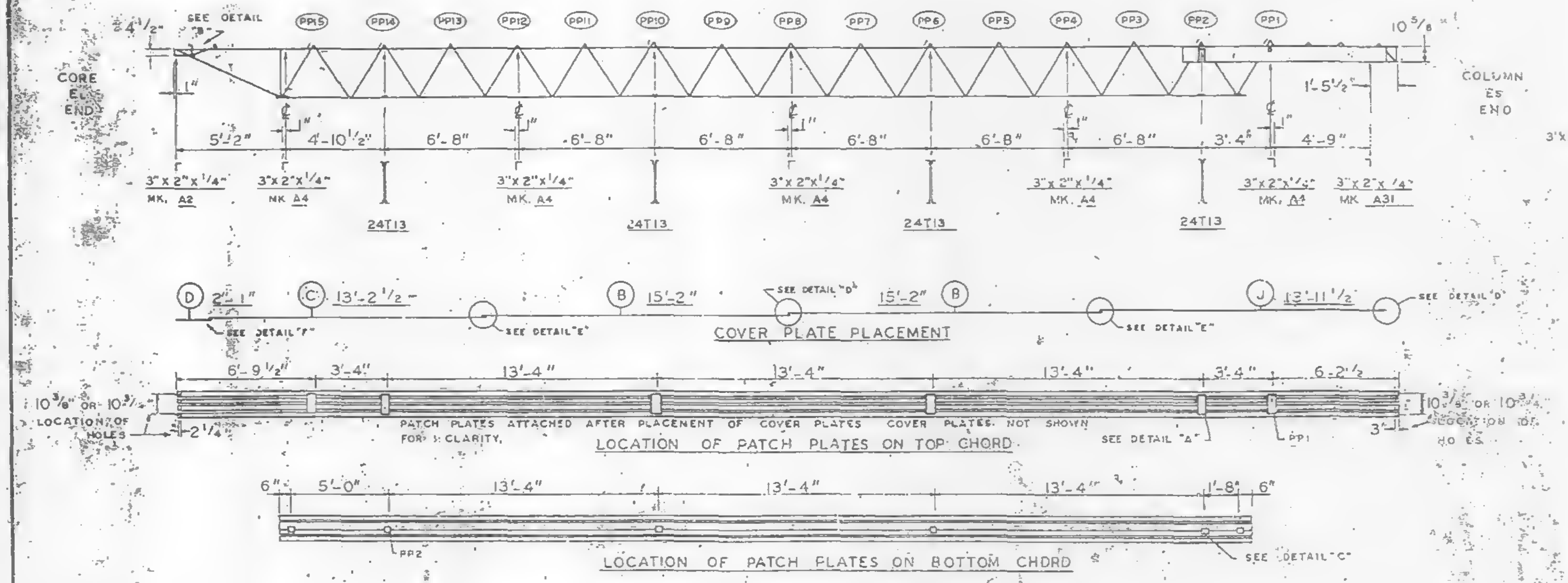

6'-2 1/2"
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223
6'-8"
3'-4"
ARC WELD MIN. 8" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230
F1
STUDS W.T.C. 230
W.T.C. 214

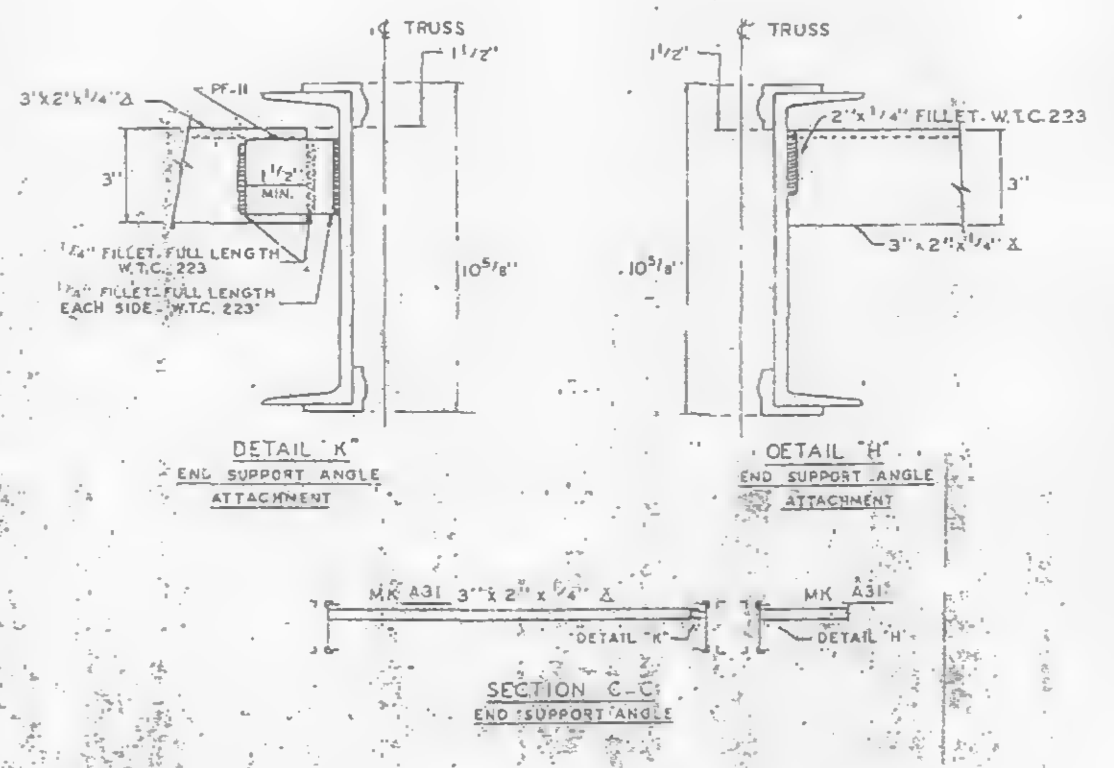
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. ORWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	BT 213
	T130	1	24T130 x 13'-3"	BT 2130
3"x 2"x 1/4" ANGLE	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A4	5	3"x 2"x 1/4"x 13'-3"	ST 403
	A31	2	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/2"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x 1 1/2"x .25"x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES ⚠1	P1	4	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	3	4 1/2"x .39"x 0'-9"	ST 400
	P3	3	4 1/2"x .39"x 1'-0"	ST 400
	P9	4	3"x 1/2"x 1'-2"	ST 409
	P10	1	4 1/2"x .39"x 0'-5"	ST 409
	P11	1	3" x 1/4"x 0'-6"	ST 409

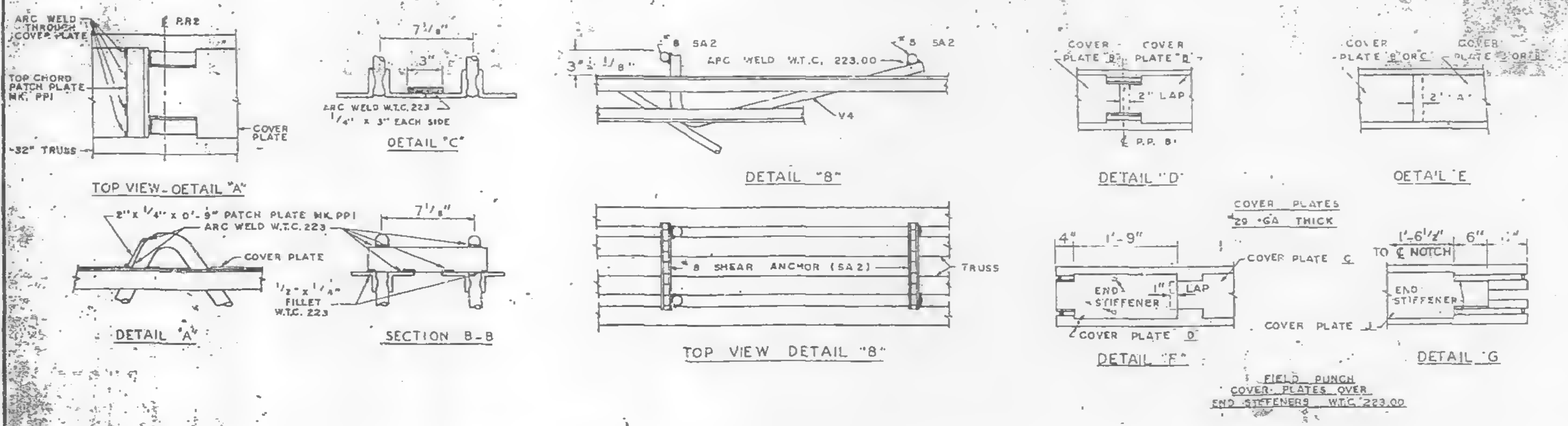
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CO 210 THRU CO 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

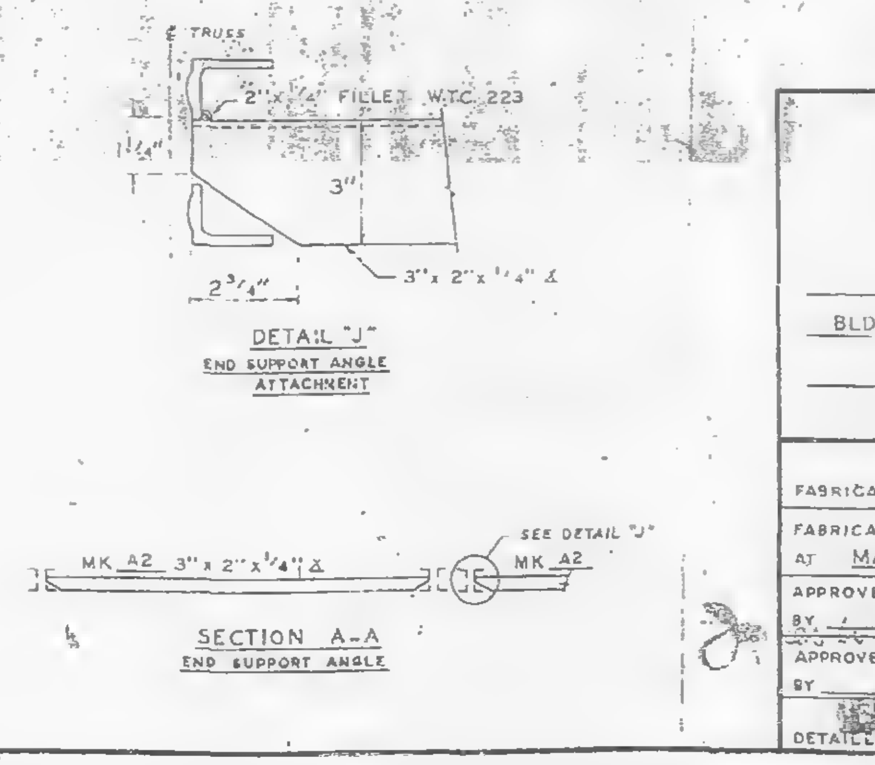



℄ TRUSS
3"x 2"x 1/4" Δ
PF-11
1 1/2" MIN.
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE W.T.C. 223
10 5/8"
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
2"x 1/4" FILLET W.T.C. 223
3"x 2"x 1/4" Δ
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT
MK A31 3"x 2"x 1/4" Δ
SECTION C-C
END SUPPORT ANGLE

1	5-12-69	AS NOTED	G.D.C
NO.	DATE	REVISION	BY

REF. DRWG.		
	7-A83-27	10-4-68
	7-A81-13	10-4-68
	7-A82-8	7-22-68
	7-A84-28	7-22-68
	SA-124	10-11-68
	7-A83-24	8-15-68



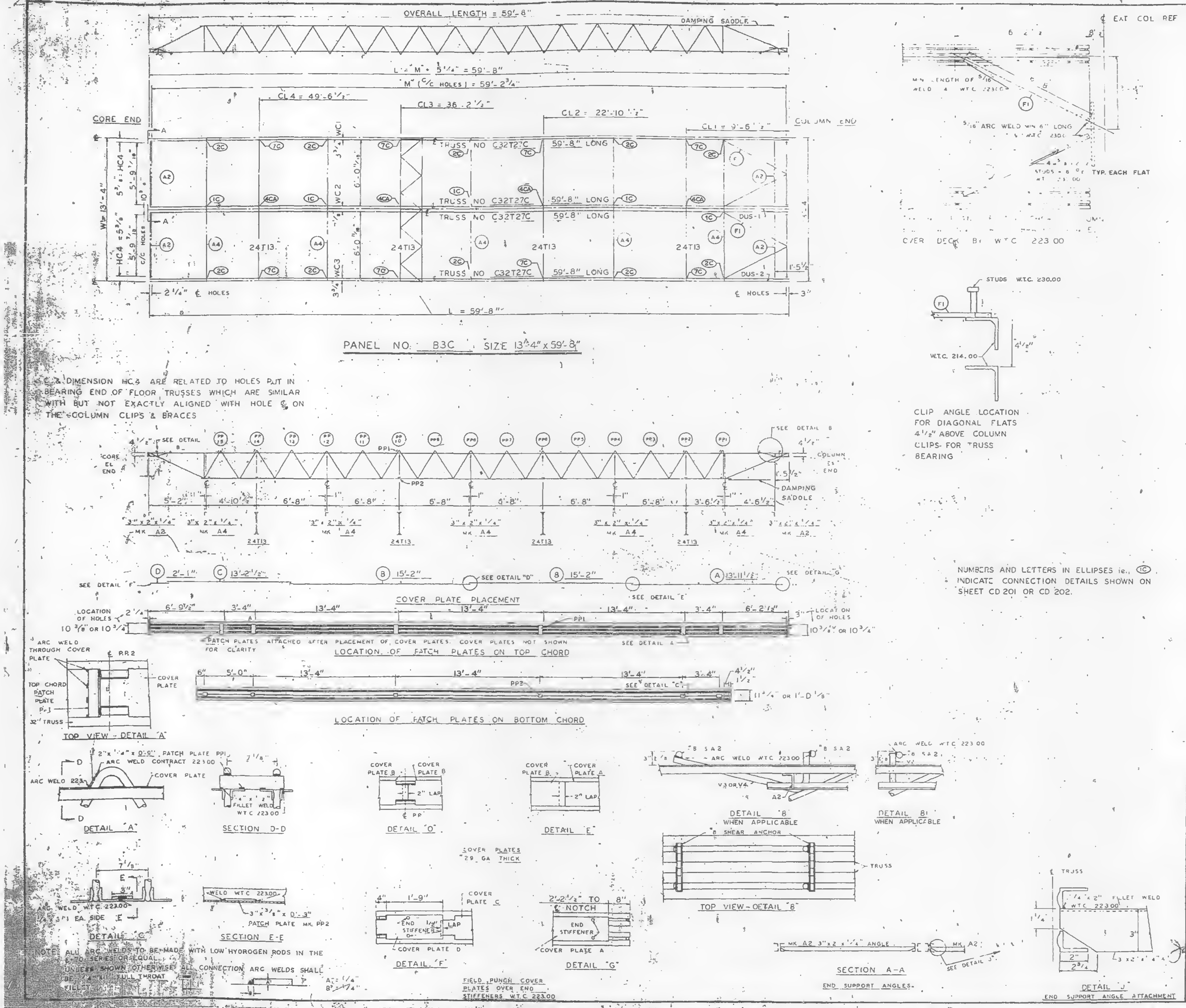


FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL BR2C-13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-27	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE 6/6/69	DRAWN BY luk DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP BR2C



PANEL NO. B3C SIZE 13'-4" x 59'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES ie. 1C INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" [illegible] FULL THROAT FILLET
A = ¼"
B = ¼"

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T27C	4	C32T27C-59'-8"	ST227C
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	BT213
3"x2"x¼ ANGLE	A2	4	3"x2"x¼"x5'-11 9/16"	ST403
	A4	5	3"x2"x¼"x13'-3"	ST403
DIAGONAL FLATS	F1	4	1½"x5/8"x6'-8"	ST402
PATCH PLATES	PP1	12	2"x¼"x0'-9"	ST400
	PP2	12	3"x3/8"x0'-3"	ST400
COVER PLATES	A	2	9"x.0135"x13'-[illegible]2"	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2½"	ST303
	D	2	9" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1½"x¼" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3½"x3½"x3/8"x3'-1 7/8"	ST298
	DUS-2	1	3½"x3½"x3/8"x3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1"∅ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3½" x 3/8" x 6½"	ST 400
	P2	4	4½" x .30" x 0'-[illegible]"	ST 400
	P3	4	4½" x .39" x 1'-0"	ST 400

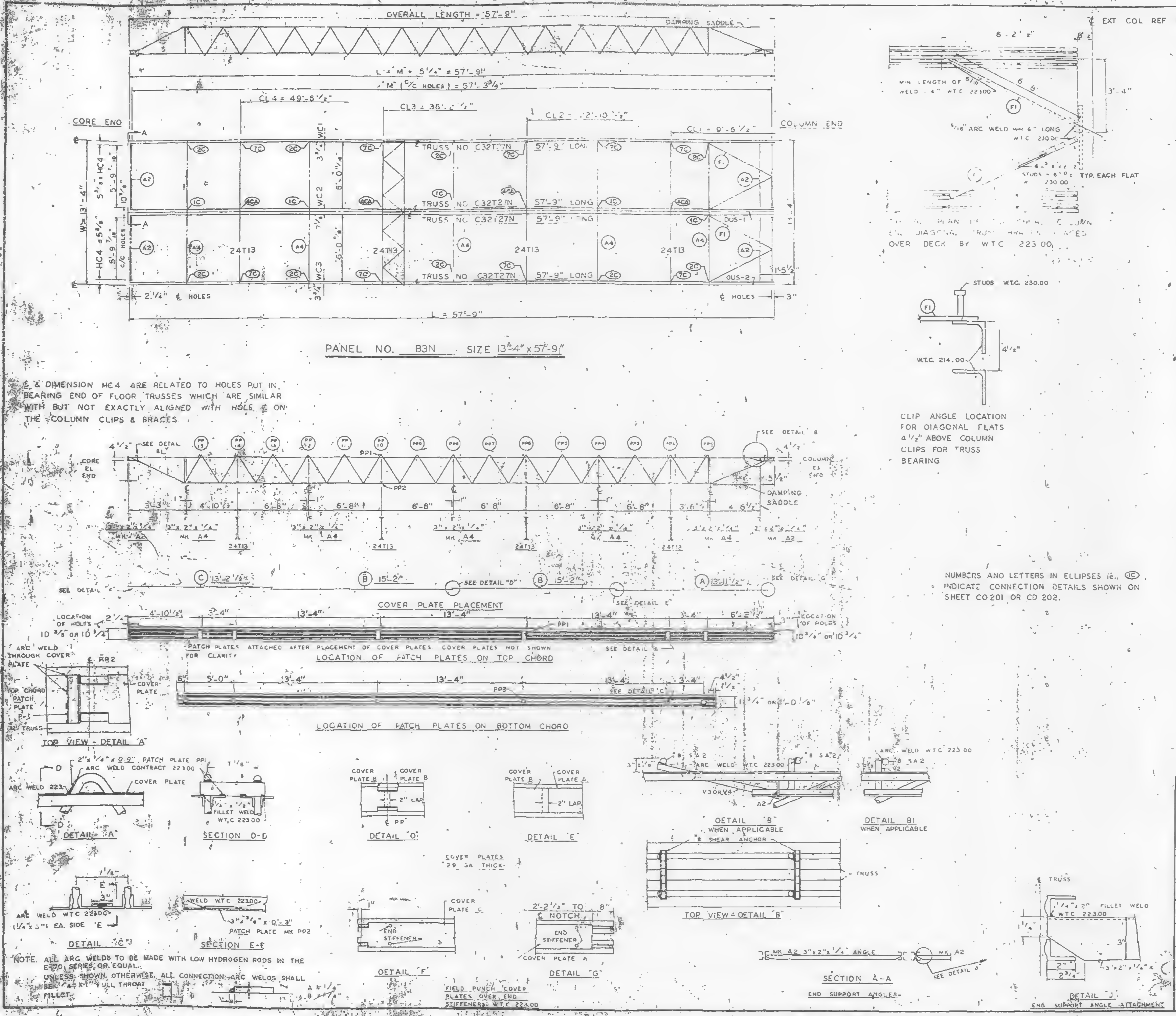
NO.	DATE	REVISION	BY

REF DRWG	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	1-6-69
7-AB3-43	1-6-69
7-AB1 #24	1-6-69
7-AB4-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (SOUTH)
PANEL B3C - 13'-4" x 59'-8"
BLDG. B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-43	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE 7/31/69	DRAWN BY DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DIV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP B3C


OVERALL LENGTH = 57'-9"
DAMPING SADDLE
L = "M" + 5 1/4" = 57'-9"
"M" (C/C HOLES) = 57'-3 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
CORE END
COLUMN END
EXT COL REF LINE
TRUSS NO C32T27N 57'-9" LONG
24T13
W = 13'-4"
HC4 = 5 5/8"
℄ HOLES
L = 57'-9"
PANEL NO. B3N SIZE 13'-4" x 57'-9"
SEE DETAIL B
DAMPING SADDLE
COVER PLATE PLACEMENT
SEE DETAIL "D"
SEE DETAIL E
SEE DETAIL G
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
DETAIL "B" WHEN APPLICABLE
DETAIL B1 WHEN APPLICABLE
TOP VIEW - DETAIL "B"
#8 SHEAR ANCHOR
TRUSS
DETAIL "C"
SECTION E-E
3" x 3/8" x 0'-3" PATCH PLATE MK PP2
DETAIL "F"
DETAIL "G"
COVER PLATES .29 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00
SECTION A-A
END SUPPORT ANGLES
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
STUDS W.T.C. 230.00
W.T.C. 214.00
STUDS @ 6" O.C. TYP. EACH FLAT

OVER DECK BY W T C 223 00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

NUMBERS AND LETTERS IN ELLIPSES i.e., ⓘ1C INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T27N	4	C32T27N-57'-9"	[illegible]
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	BT213
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 9/16"	ST403
	A4	5	3"x2"x1/4"x13'-3"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST402
PATCH PLATES	PP1	12	2"x1/4"x0'-9"	ST400
	PP2	12	3"x3/8"x0'-3"	ST400
COVER PLATES	A	2	9"x0.135"x3'-[illegible]	[illegible]
	B	4	9"x0135"x15'-2"	ST303
	C	2	9"x.0135"x13'-2 1/2"	ST303
ANGLE CLIPS	C1	12	2"x1 1/2"x1/4"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x3/8"x3'-3 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-8"	ST 400
	P3	4	4 1/2" x .30" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

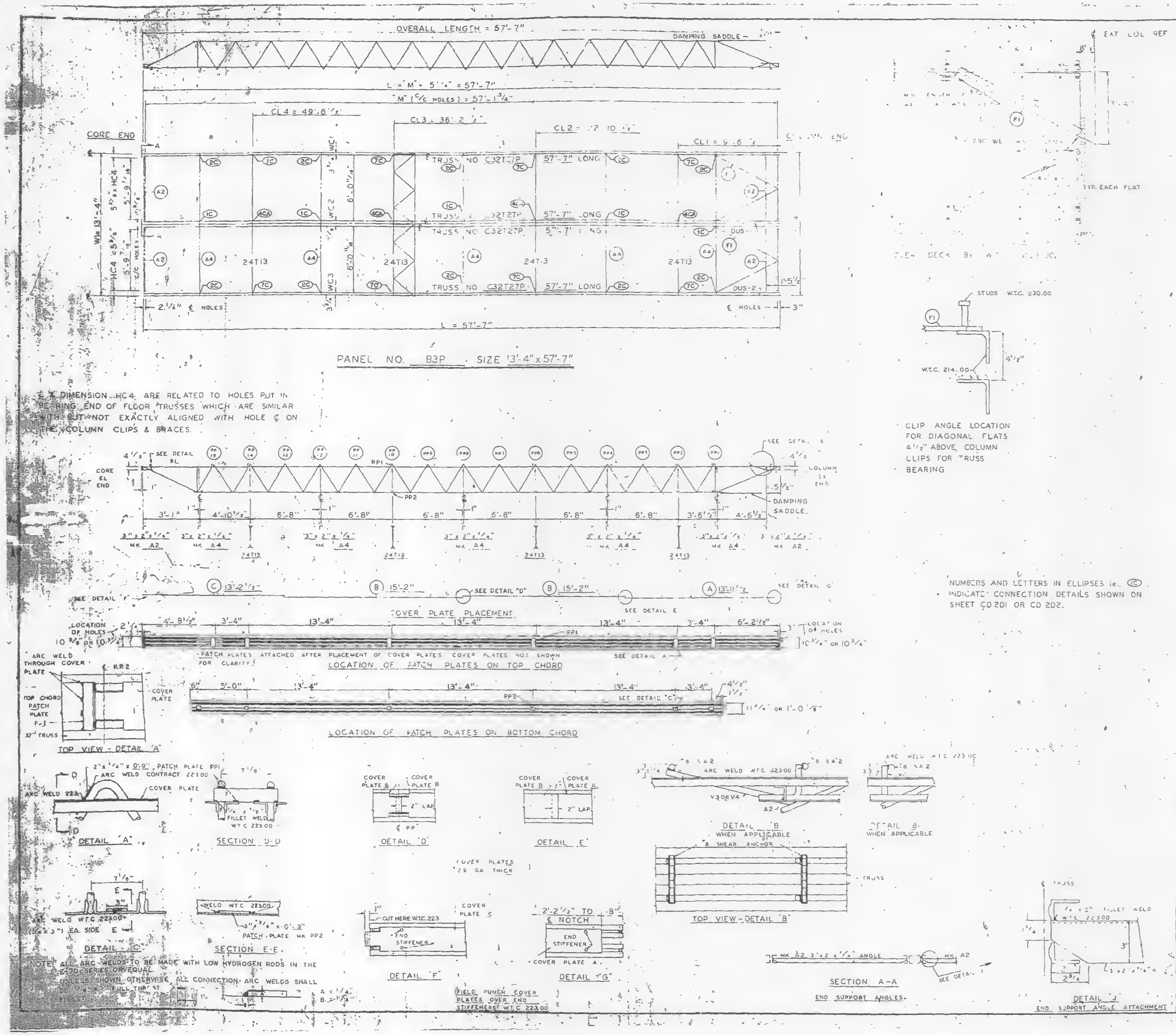
REF DRWG

7-AB4-3	10-15-68
7-AB4 15 & 16	7-22-68
7-AB4 42	10-15-68
SA-124	1-6-69
7-AB3-43	1-6-69
7-AB1-24	1-6-69
7-AB2-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 44 (EAST)
PANEL B3N - 13'-4" x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-43
PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 7/31/69
DRAWN BY DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T M CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD.
DETAILED BY A C WEBER
FABRICATION CONT. NO W.T.C 221
SHEET NO FD B3N



₵ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ₵ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼ x 1½" FULL THROAT FILLET. A = ¼" B = 1½"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T27P	4	C32T27P-57'-7"	ST227P
BRIDGING TRUSSES	T13	4	24T13 13'-3"	BT213
SUPPORT ANGLE	A2	3	3"x2"x¼"x 5'-9/16"	ST403
	A4	5	3"x2"x¼"x 13'-3"	ST403
DIAGONAL FLATS	F1	4	2"x⅝"x 6'-8"	ST402
PATCH PLATES	PP1	12	2"x¼"x 0'-9"	ST400
	PP2	12	3"x⅜"x 0'-3"	ST400
COVER PLATES	A	2	9"x .0135"x 13'-11½"	ST303
	B	4	9"x .0135"x 15'-2"	ST303
	C	2	9"x .0135"x 13'-2½"	ST303
ANGLE CLIPS	C1	12	2"x 1½"x¼"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLES	DS1	1	3½"x3½"x⅜"x 3'-3⅞"	ST298
	DS2	1	3½"x3½"x⅜"x 3'-6⅞"	ST298
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3½"x⅜"x 6½"	ST 400
	P2	4	4½"x .39"x 0'-9"	ST 400
	P3	4	4½"x .39"x 1'-0"	ST 400

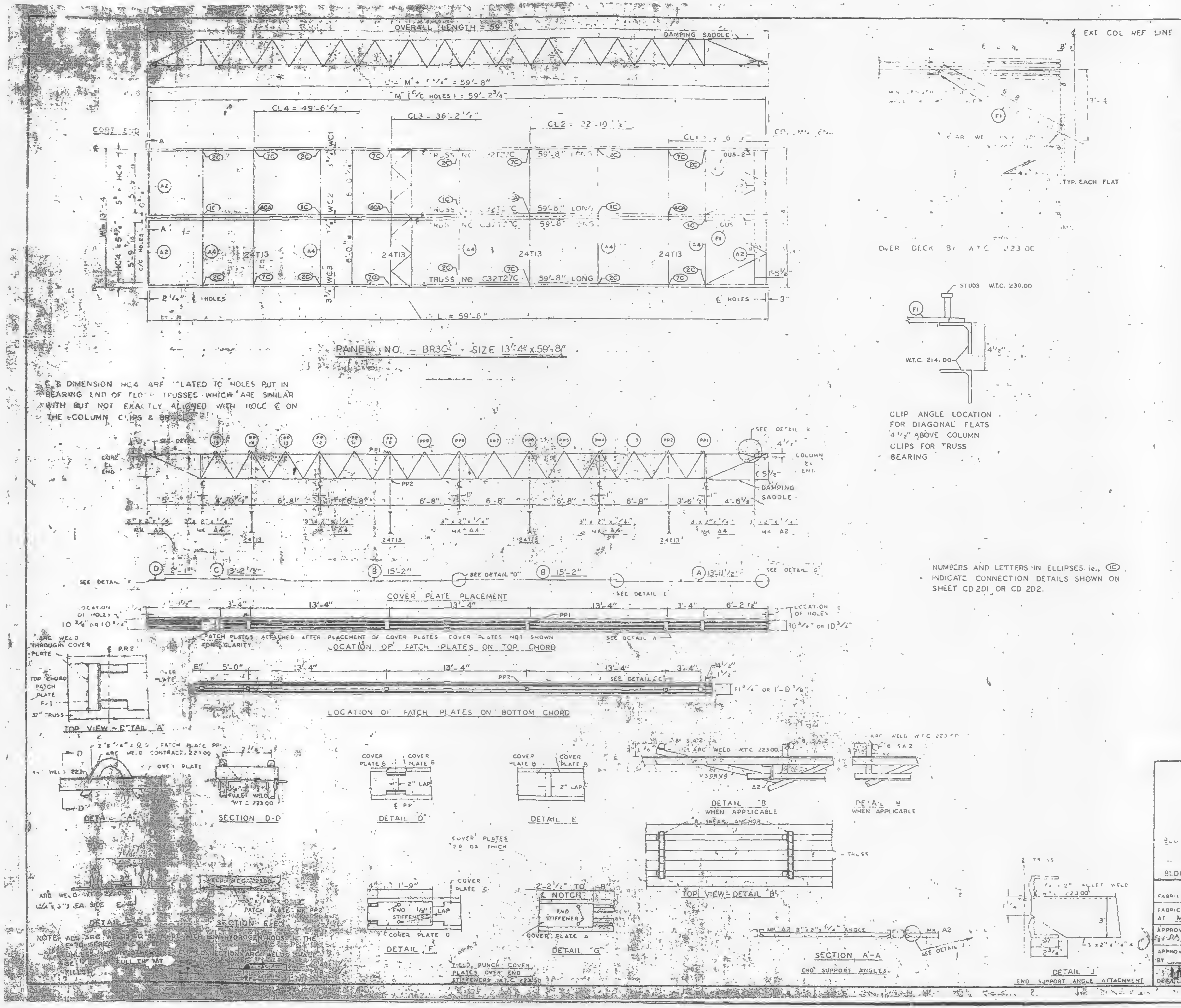
NO.	DATE	REVISION	BY

REF DRWG	
7-AB4 3	10-15-68
7-AB4 15 & 16	7-22-68
7-AB4 42	10-15-68
SA 24	1-6-69
7-AB3 43	1-6-69
7-AB 24	1-6-69
7-AB2	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 76 (NORTH)
PANEL B3P 13'-4" x 57'-7"
BLDG. B FLOORS 78 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 AB3 43 PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 1/3/69
DRAWN BY DATE APRIL 28 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO. FP B3P



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 2D1 OR CD 2D2.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES [illegible]

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T2	4	C32T [illegible] 59'-8"	ST2[illegible]
[illegible]	T3	4	24T [illegible] 3	BT2[illegible]
[illegible] ANGLE	A2	4	[illegible]	ST4[illegible]
	A4	6	[illegible]	[illegible]
[illegible]	[illegible]	4	2 x [illegible] x 6 [illegible]	[illegible]
PATCH PLATES	PP1	12	[illegible]	[illegible]
	PP2	12	[illegible]	[illegible]
COVER PLATES	A	2	9" x .0135" x [illegible]	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-7 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0	ST 400

NO.	DATE	REVISION	BY

REF DRWG	
7-AB4-[illegible]	10-15-68
7-AB4-[illegible] & 6	7-22-68
7-AB4-42	10-15-68
SA-[illegible]4	1-6-69
7-AB3-44	1-6-69
7-AB[illegible]-24	1-6-69
7-AB2-8	7-22-68

FLOOR PANEL DETAILS

[illegible]

THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 78 (SOUTH)

PANEL BR3C [illegible] 4" x 59'-8"

BLDG B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. AB3 44 PLATE

APPROVED FOR FABRICATION BY M. White FOR P.O.N.Y.A DATE 7/31/69

DRAWN BY [illegible] DATE APRIL 28, 1969

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

CHECKED BY T M CHURA DATE APRIL 28, 1969

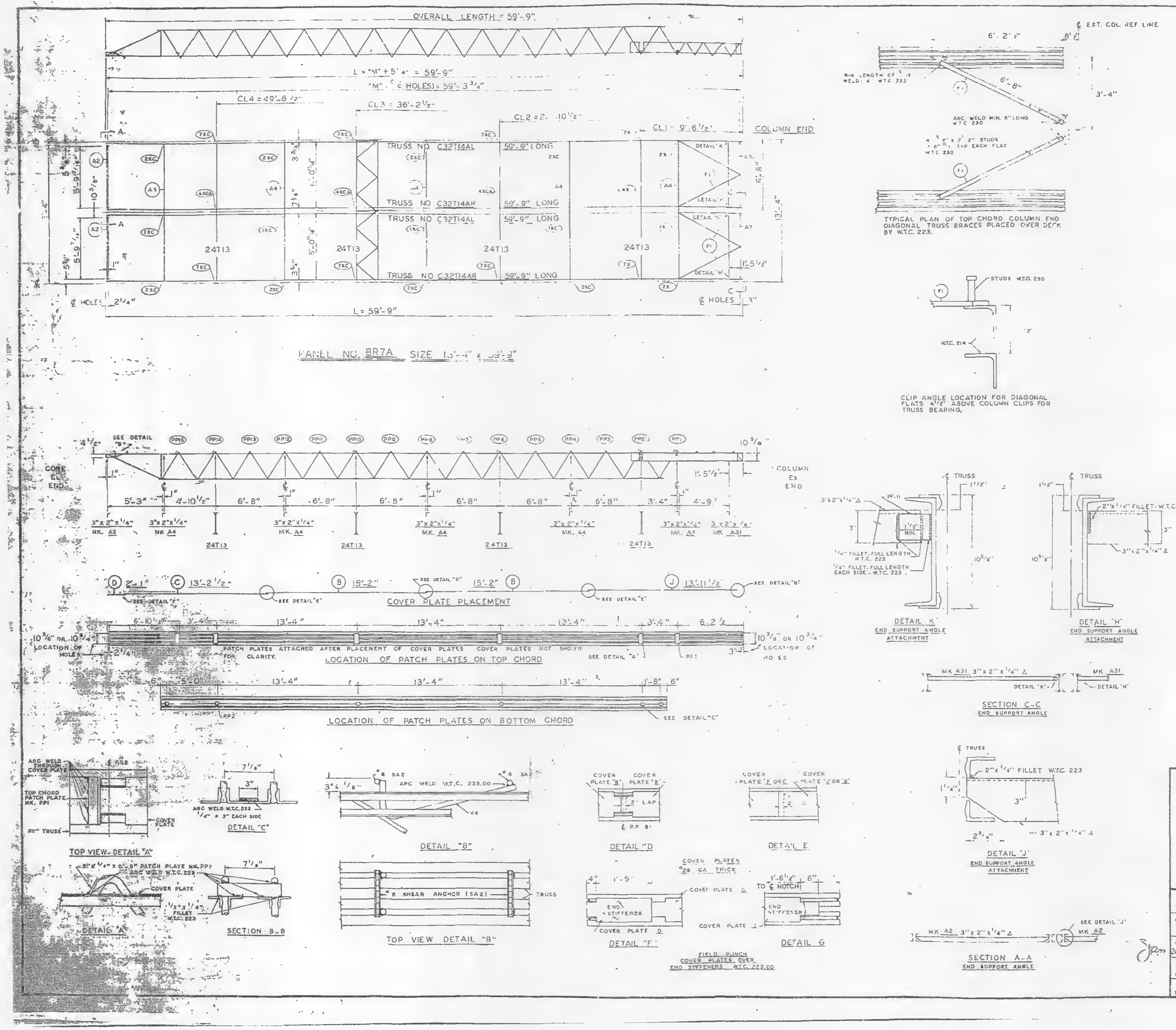
IN CHARGE OF [illegible]

LACLEDE STEEL CO.

DETAILED BY A.C. WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FD BR3C



OVERALL LENGTH = 59'-9"
L = "M" + 5 4" = 59'-9"
"M" (℄ HOLES) = 59'-3 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 2 -10 1/2"
CL1 - 9'-6 1/2"
COLUMN END
TRUSS NO C32T14AL 59'-9" LONG
TRUSS NO C32T14AR 59'-9" LONG
TRUSS NO C32T14AL 59'-9" LONG
TRUSS NO C32T14AR 59'-9" LONG
24T13
DETAIL "K"
DETAIL "H"
℄ HOLES 2 1/4"
℄ HOLES 3"
L = 59'-9"
PANEL NO. BR7A SIZE 13'-4" x 59'-9"
CORE EL END
5'-3"
4'-10 1/2"
6'-8"
3'-4"
4'-9"
3"x2"x1/4" MK. A2
3"x2"x1/4" MK. A4
3"x2"x1/4" MK. A31
COVER PLATE PLACEMENT
13'-2 1/2"
15'-2"
13'-11 1/2"
SEE DETAIL "E"
SEE DETAIL "F"
SEE DETAIL "D"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
10 3/8" OR 10 3/4" LOCATION OF HOLES
13'-4"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
6'-2"
6'-8"
3'-4"
MIN LENGTH OF 3" WELD 4 W.T.C. 223
ARC WELD MIN 6" LONG W.T.C. 230
STUDS TYP EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
℄ TRUSS
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET - W.T.C. 223
3"x2"x1/4" ∠
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK A31 3"x2"x1/4" ∠
SECTION C-C END SUPPORT ANGLE
2"x1/4" FILLET W.T.C. 223
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
MK A2 3"x2"x1/4" ∠
SEE DETAIL "J"
SECTION A-A END SUPPORT ANGLE
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
32" TRUSS
COVER PLATE
TOP VIEW - DETAIL "A"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
DETAIL "C"
#8 SA2
ARC WELD W.T.C. 223.00
DETAIL "B"
COVER PLATE "B"
COVER PLATE "B"
2" LAP
℄ P.P. 8
DETAIL "D"
COVER PLATE "C" OR "J"
COVER PLATE "C" OR "B"
DETAIL E
2"x1/4" x 0'-9" PATCH PLATE MK. PP1
ARC WELD W.T.C. 223
1/2"x1/4" FILLET W.T.C. 223
DETAIL "A"
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW DETAIL "B"
COVER PLATES 29 GA THICK
END STIFFENER
COVER PLATE C
COVER PLATE D
DETAIL "F"
TO ℄ NOTCH
DETAIL G
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	4AL	2	32T4AL x 59'-9"	ST 214AL
	T14AR	2	32T14AR x 59'-9"	ST 214AR
	[illegible]	4	[illegible] x 13'-3"	ST 213
BRIDGING TRUSSES				
3"x 2"x 1/4" ANGLE	A2	2	[illegible] x 5'-11 9/16"	ST 403
	[illegible]	5	[illegible] 3"	ST 403
	[illegible]	[illegible]	[illegible] 8'-8"	ST 410
CLOSURE PLATE	[illegible]	[illegible]	[illegible]	ST 4 2
DIAGONAL FLAT	[illegible]	4	[illegible] x 6'-8"	ST 402
PATCH PLATE	PP	2	2 x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x.0135" x 15'-2"	ST 303
	C	2	9"x.0135" x 13'-2 1/2"	ST 303
	D	2	9"x.0135" x 2'-1"	ST 303
	J	2	9"x.0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	6	2"x1 1/2"x.25" x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	[illegible]	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2 x 3/8" x 0'-6 1/2"	ST 400
	P2	4	[illegible]" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
	P9	4	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie , (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CO 210 THRU CO 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY

REF DRWG.

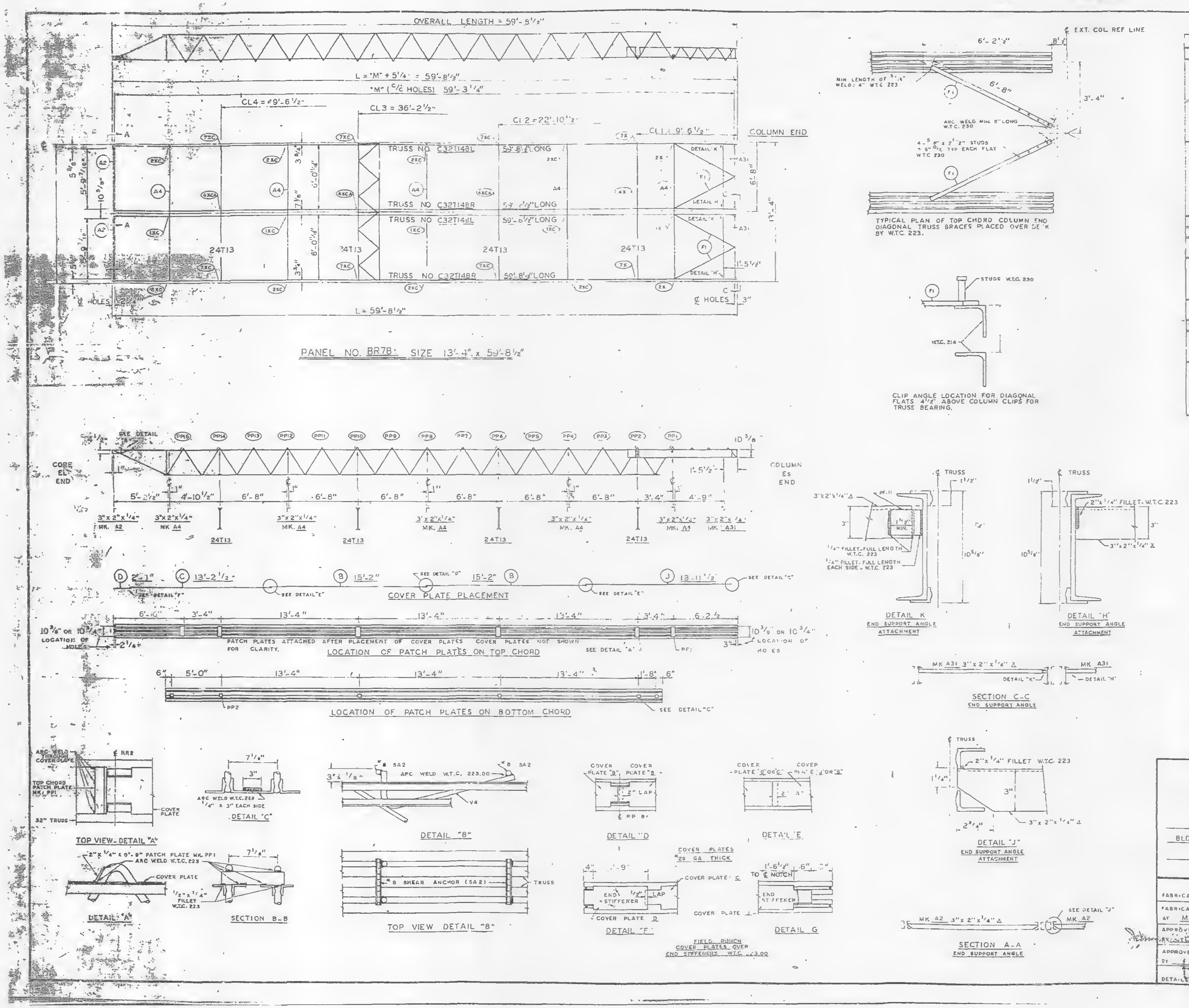
7-A83-27	10-4-68
7-A81-14	10-4-68
7-A8? 8	7-22-68
7-A84-28	7-22-68
SB-124	3-[illegible]
7-A83-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

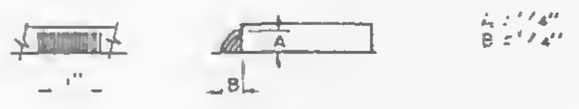
PANEL BR7A - 13'-4" x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-21
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PORT-[illegible] DATE 6/6/69
DRAWN BY [illegible] DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY R.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP BR7A


OVERALL LENGTH = 59'-9 1/2"
L = "M" + 5 1/4" = 59'-8 1/2"
"M" (C/C HOLES) 59'-3 1/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO C32T14BL 59'-8 1/2" LONG
TRUSS NO C32T14BR 59'-8 1/2" LONG
TRUSS NO C32T14BL 59'-8 1/2" LONG
TRUSS NO C32T14BR 59'-8 1/2" LONG
24T13
DETAIL "K"
DETAIL "H"
2 HOLES
℄ HOLES
L = 59'-8 1/2"
PANEL NO. BR7B SIZE 13'-4" x 59'-8 1/2"
6'-2 1/2"
EXT. COL REF LINE
6'-8"
3'-4"
MIN LENGTH OF 5/16" WELD 4" W.T.C. 223
ARC WELD MIN. 5" LONG W.T.C. 230
STUDS W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
SEE DETAIL
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
CORE EL END
COLUMN ES END
5'-2 1/2" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-4" 4'-9"
3"x2"x1/4" MK. A2
3"x2"x1/4" MK. A4
3"x2"x1/4" MK. A31
COVER PLATE PLACEMENT
SEE DETAIL "E"
SEE DETAIL "D"
SEE DETAIL "F"
SEE DETAIL "G"
13'-2 1/2" 15'-2" 15'-2" 13'-11 1/2"
6'-10" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"
10 3/8" OR 10 3/4" LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "A"
6" 5'-0" 13'-4" 13'-4" 13'-4" 1'-8" 6"
PP2
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
COVER PLATE
32" TRUSS
TOP VIEW - DETAIL "A"
2"x1/4" x 0'-9" PATCH PLATE MK. PP1 ARC WELD W.T.C. 223
1/2"x1/4" FILLET W.T.C. 223
DETAIL "A"
7 1/8"
3"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
DETAIL "C"
SECTION B-B
SA2
ARC WELD W.T.C. 223.00
V4
DETAIL "B"
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW DETAIL "B"
COVER PLATE "B" COVER PLATE "D"
2" LAP
DETAIL "D"
COVER PLATE "B" OR "C" COVER PLATE "E" OR "B"
DETAIL "E"
COVER PLATES 20 GA THICK
COVER PLATE
END STIFFENER
LAP
COVER PLATE "D"
DETAIL "F"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
TO ℄ NOTCH
END STIFFENER
DETAIL G
TRUSS
3"x2"x1/4"
PF-11
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE W.T.C. 223
10 5/8"
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET-W.T.C. 223
3"x2"x1/4"
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK A31 3"x2"x1/4"
SECTION C-C END SUPPORT ANGLE
2"x1/4" FILLET W.T.C. 223
3"x2"x1/4"
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
MK A2 3"x2"x1/4"
SEE DETAIL "J"
SECTION A-A END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	Mk.	PCS.	SIZE	
FLOOR TRUSSES	T14BL	2	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	2	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T13	4	24T13 x 13'-3"	ST 213
3"x2"x1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-8 1/8"	ST 410
CLOSURE PLATES	[illegible]	2	3"x1/4"x0'-2 3/8"	ST 412
DIAGONAL FLATS	F	4	1 1/2"x3/8"x6'-8"	ST 402
PATCH PLATES	PP1	2	2"x1/4"x0'-9"	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
COVER PLATES	B	4	9"x.0135"x15'-2"	ST 303
	C	2	9"x.0135"x13'-2 1/2"	ST 303
	D	2	9"x.0135"x2'-1"	ST 303
	J	2	9"x.0135"x13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x1 1/2"x.25"x6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	2	[illegible]	ST 400
CONNECTION PLATES	P1	4	3 1/2"x3/8"x0'-6 1/2"	ST 400
	P2	4	4 1/2"x.39"x0'-9"	ST 400
	P3	4	4 1/2"x.39"x1'-0"	ST 400
	P9	4	3"x1/2"x1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie, (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.



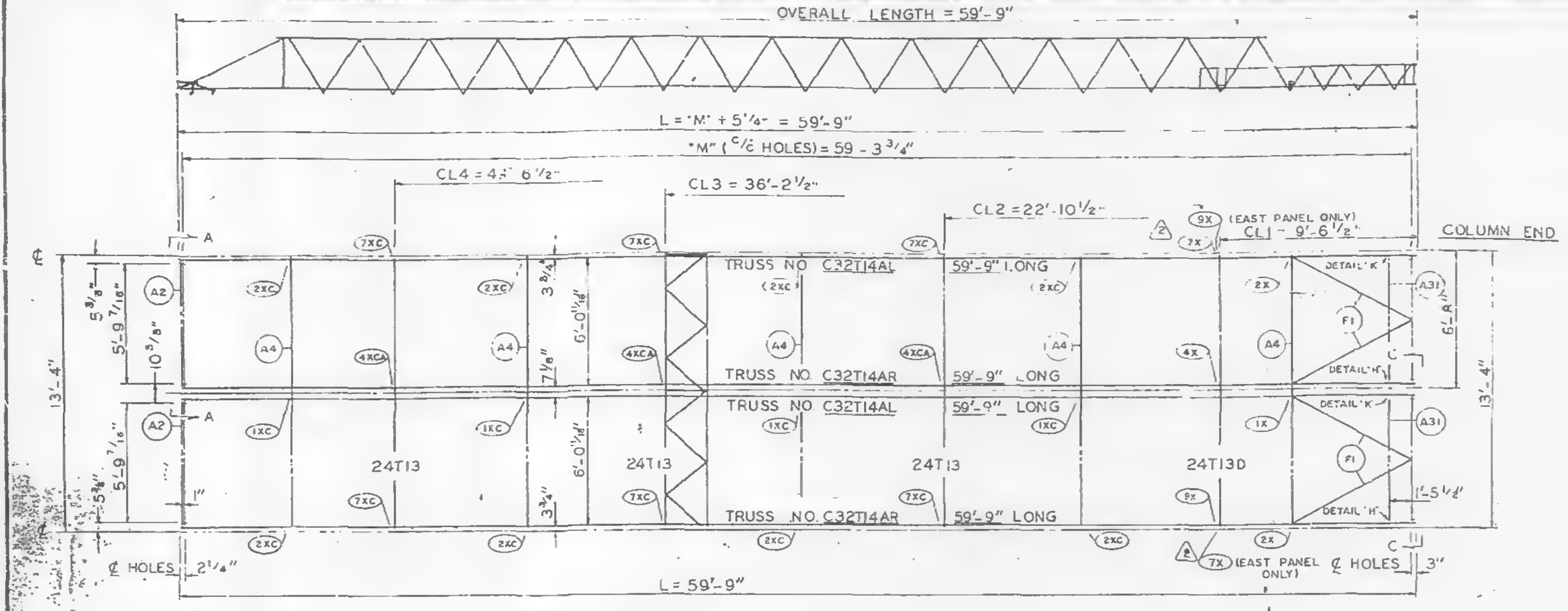
NO.	DATE	REVISION	BY

REF. DRWG.	
7-AB3-27	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SB-124	3-24-69
7-AB3-24	8-15-68

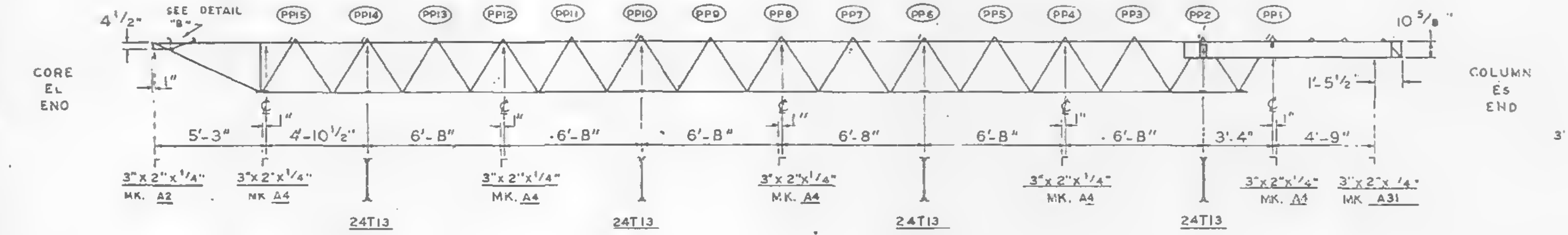
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

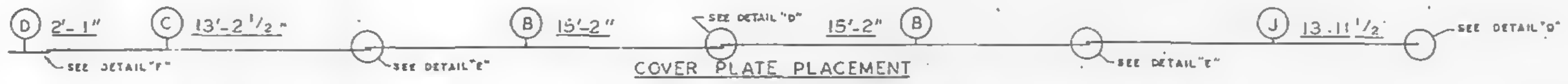
BLDG. B FLOORS (WEST)
PANEL BR7B-13'-4" x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-[illegible]
PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 6/6/69
DRAWN BY [illegible] DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
LACLEDE STEEL CO.
CHECKED BY T.M. CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP BR7B

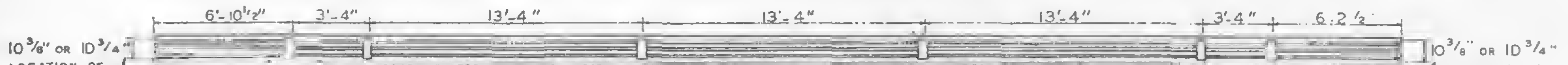


PANEL NO. B7A SIZE 13'-4" x 59'-9"





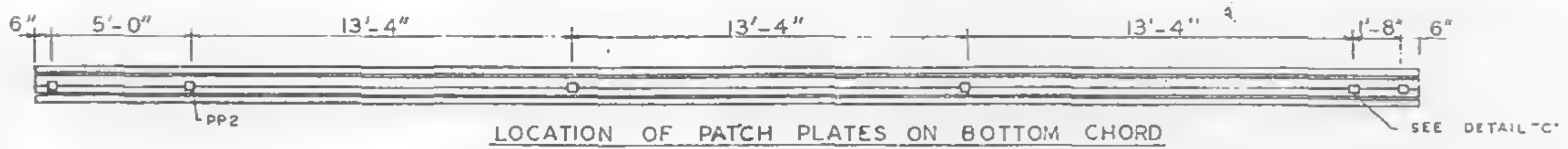
COVER PLATE PLACEMENT


6'-10½"
3'-4"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2½"
10⅜" OR 10¾" LOCATION OF HOLES
2¼"
10⅜" OR 10¾" LOCATION OF HOLES
3"

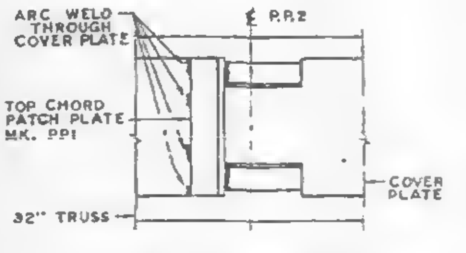
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

SEE DETAIL "A" PP1

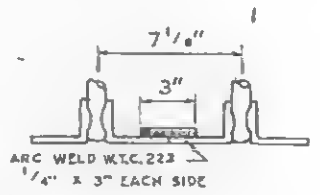
LOCATION OF PATCH PLATES ON TOP CHORD



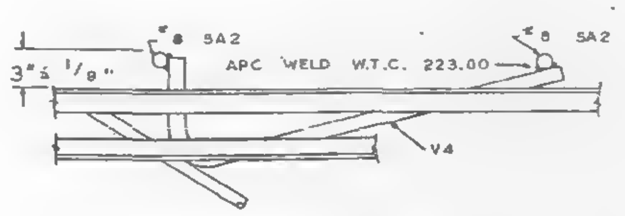
LOCATION OF PATCH PLATES ON BOTTOM CHORD



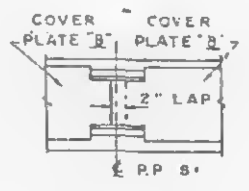
TOP VIEW - DETAIL "A"



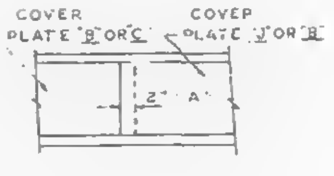
DETAIL "C"



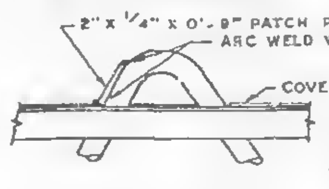
DETAIL "B"



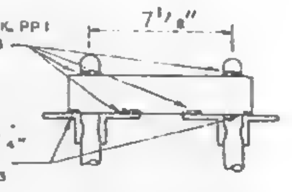
DETAIL "D"



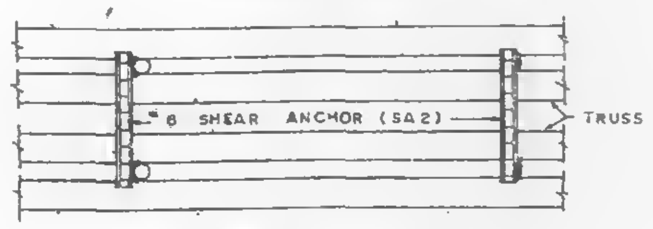
DETAIL "E"



DETAIL "A"

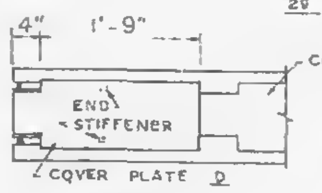


SECTION B-B

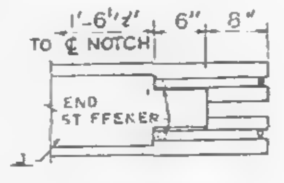


TOP VIEW DETAIL "B"

COVER PLATES #29 GA THICK

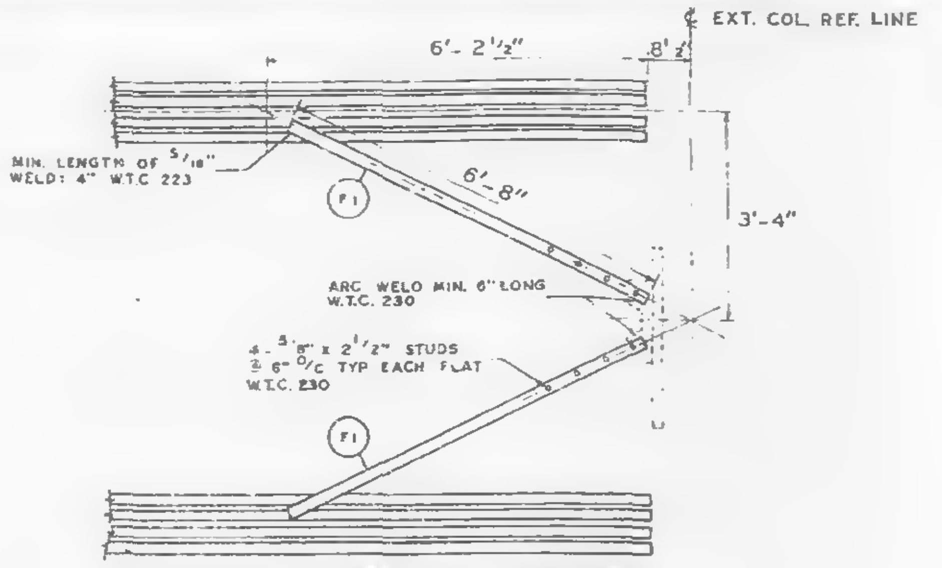


DETAIL "F"

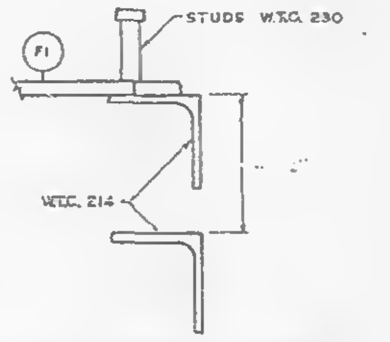


DETAIL "G"

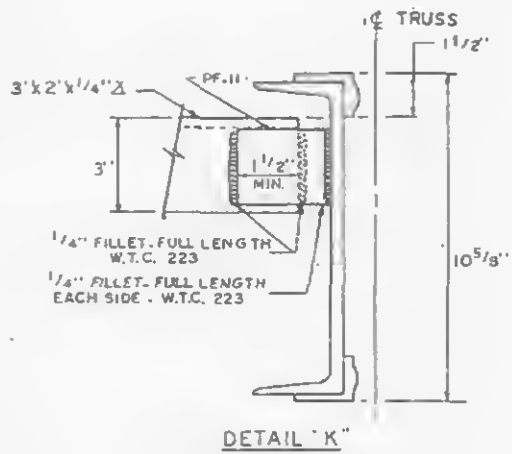
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00


℄ EXT. COL. REF. LINE
6'-2½"
8½"
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
F1
6'-8"
3'-4"
ARC WELD MIN. 6" LONG W.T.C. 230
4-⅝" x 2½" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230
F1

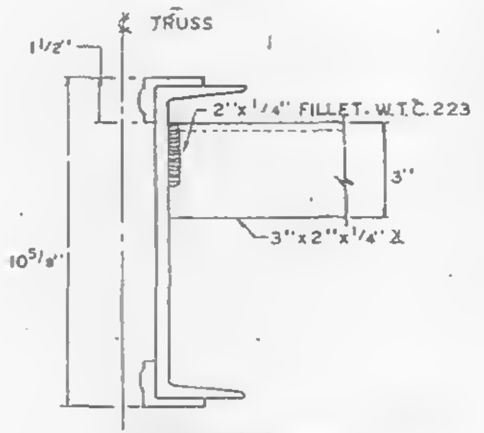
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



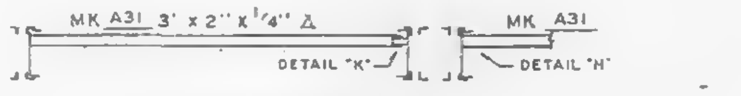
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.


℄ TRUSS
1½"
3"x2"x¼" ∠
PF.11
3"
1½" MIN.
¼" FILLET - FULL LENGTH W.T.C. 223
¼" FILLET - FULL LENGTH EACH SIDE - W.T.C. 223
10⅝"

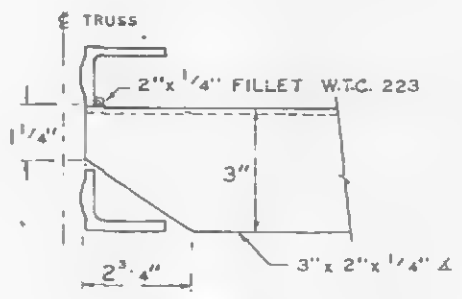
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



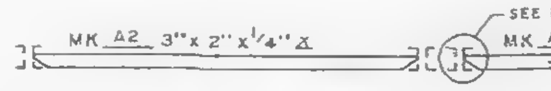
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



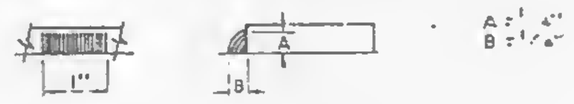
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T14AL	2	C32T14AL x 59'-9"	ST 214AL
	T14AR	2	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T13	2	24T13 x 13'-3"	BT 213
	T13D	1	24T13D x 13'-3"	BT 213D
3"x 2"x ¼" ANGLE	A2	2	3"x2"x¼"x 5'-11 9/16"	ST 403
	A4	5	3"x2"x¼"x 13'-3"	ST 403
	A31	2	3"x2"x¼"x 5'-8⅛"	ST 410
CLOSURE PLATES	PF.1	-	3" x ¼" x 0'-2⅜"	ST 412
DIAGONAL FLATS	F1	4	1½" x ⅜" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x ¼" x 0'-9"	ST 400
	PP2	12	3" x ⅜" x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 15'-2"	ST 303
	C	2	9" x .0135" x 13'-2½"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11½"	ST 304
ANGLE CLIPS	C1	16	2" x 1½" x .25" x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	" ø x 1'-3"	ST 400
CONNECTION PLATES △2	P1	4	3½" x ⅜" x 0'-6½"	ST 400
	P2	3* 4	4½" x .39" x 0'-9"	ST 400
	P3	3* 4	4½" x .39" x 1'-0"	ST 400
	P9	4	3" x ½" x 1'-2"	ST 409
△1	P10	1*	4½" x .39" x 0'-5"	ST 409
	P11	1*	3" x ¼" x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 62 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x ¼" FULL THROAT FILLET.



△2 MATERIAL MARKED (*) IS FOR WEST PANELS ONLY.

NO.	DATE	REVISION	BY
△2	6-13-69	AS NOTED	G.D.C.
1	5-12-69	AS NOTED	G.D.C.

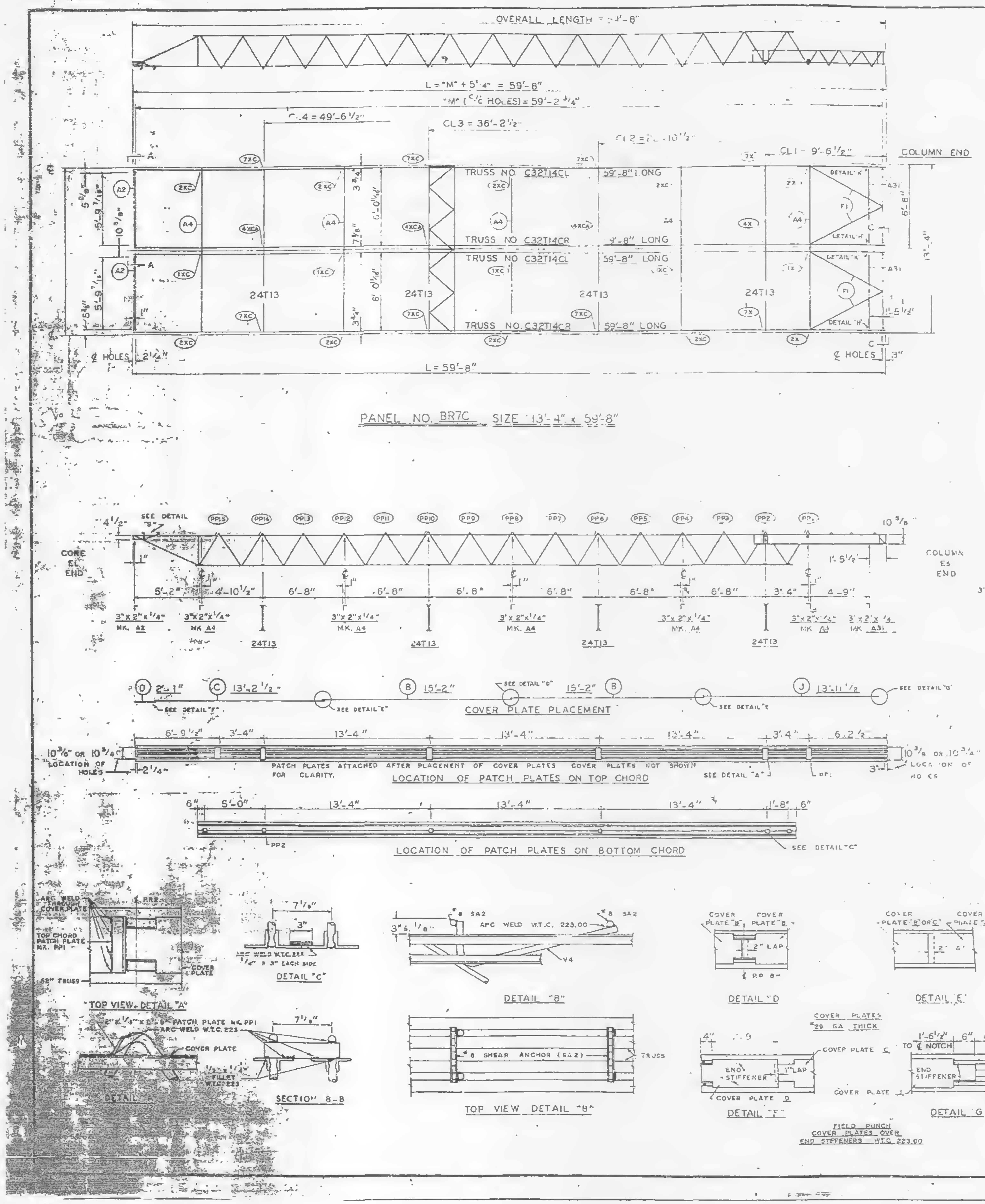
REF DRWG.		
	7-A83-28	10-4-68
	7-A81-13	10-4-68
	7-A82-8	7-22-68
	7-A84-28	7-22-68
	58-124	3-24-69
	7-A83-24	8-15-68

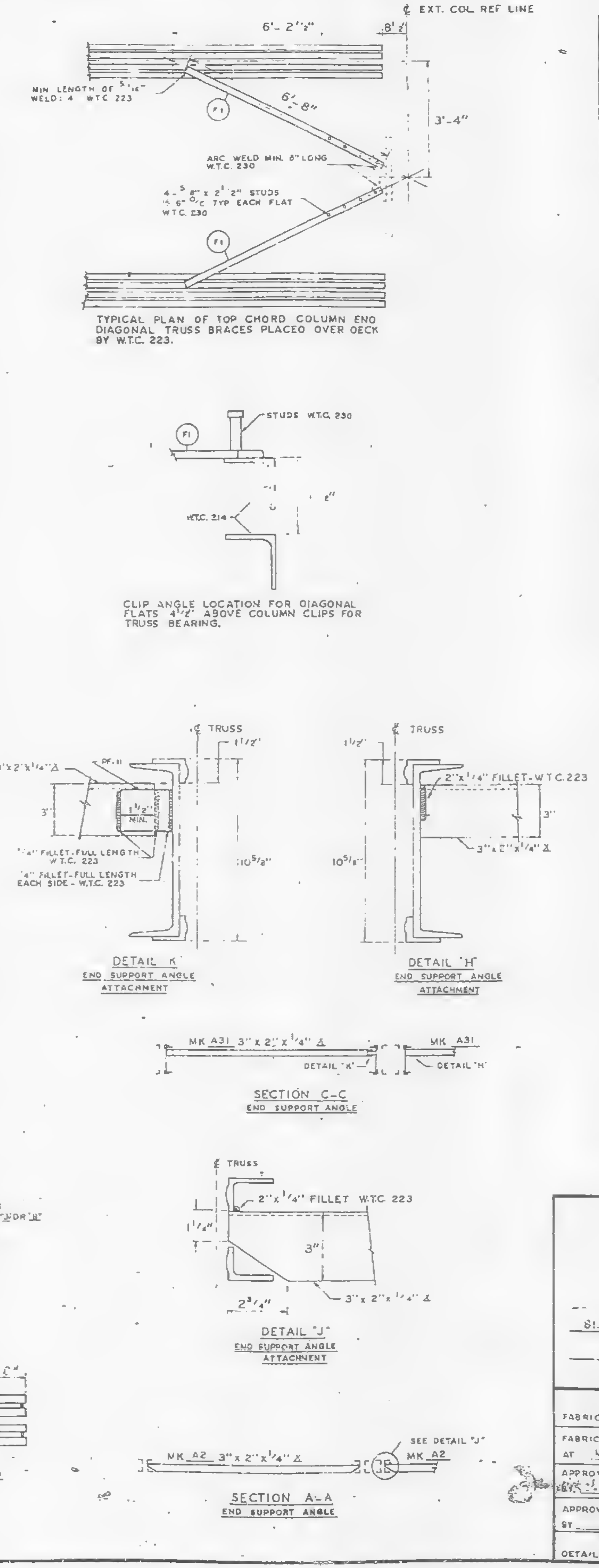
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

PANEL B7A-13'-4" x 59'-9"

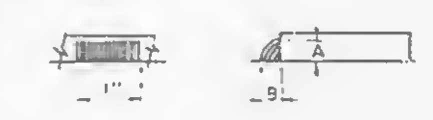
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-26 PLATE
APPROVED FOR FABRICATION BY James White FOR P.O.N.Y.A. DATE 6/20/69
DRAWN BY luk DATE MAY 6, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE MAY 6, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP B7A


OVERALL LENGTH = 59'-8"
L = "M" + 5¼" = 59'-8"
"M" (C/L HOLES) = 59'-2 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14CL 59'-8" LONG
TRUSS NO. C32T14CR 59'-8" LONG
TRUSS NO. C32T14CL 59'-8" LONG
TRUSS NO. C32T14CR 59'-8" LONG
24T13
DETAIL "K"
DETAIL "H"
13'-4"
C/L HOLES 2 1/2"
C/L HOLES 3"
L = 59'-8"
PANEL NO. BR7C SIZE 13'-4" x 59'-8"
SEE DETAIL "B"
PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
CORE END
COLUMN END
5'-2" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-4" 4'-9"
3"x2"x1/4" MK. A2
3"x2"x1/4" MK. A4
3"x2"x1/4" MK. A31
COVER PLATE PLACEMENT
D 2'-1" C 13'-2 1/2" B 15'-2" 15'-2" B J 13'-11 1/2"
SEE DETAIL "F" SEE DETAIL "E" SEE DETAIL "D" SEE DETAIL "G"
6'-9 1/2" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"
10 5/8" OR 10 3/4" LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "A"
5'-0" 13'-4" 13'-4" 13'-4" 1'-8" 6"
PP2
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE MK. PP1
TOP VIEW - DETAIL "A"
2"x1/4"x0'-9" PATCH PLATE MK. PP1 ARC WELD W.T.C. 223
COVER PLATE
DETAIL "A"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
DETAIL "C"
SECTION B-B
APC WELD W.T.C. 223.00
#8 SA2
DETAIL "B"
#8 SHEAR ANCHOR (SA2)
TRUSS
TOP VIEW DETAIL "B"
COVER PLATE "B" COVER PLATE "B"
2" LAP
DETAIL "D"
COVER PLATE "B" COVER PLATE "D"
DETAIL "E"
COVER PLATES 29 GA. THICK
END STIFFENER
1" LAP
COVER PLATE "C"
COVER PLATE "D"
DETAIL "F"
TO C/L NOTCH
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00


C/L EXT. COL. REF. LINE
6'-2 1/2"
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
6'-8"
3'-4"
ARC WELD MIN. 8" LONG W.T.C. 230
4-3/8" x 2 1/2" STUDS @ 6" O/C TYP. EACH FLAT W.T.C. 230
F1
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
C/L TRUSS
1/4" FILLET-FULL LENGTH W.T.C. 223
1/4" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
10 5/8"
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET-W.T.C. 223
3"x2"x1/4" X
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
MK A31 3"x2"x1/4" X
SECTION C-C END SUPPORT ANGLE
2"x1/4" FILLET W.T.C. 223
2 3/4"
3"x2"x1/4" X
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
MK A2 3"x2"x1/4" X
SEE DETAIL "J"
SECTION A-A END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	[illegible]	4	24T13 x 13'-3"	BT 213
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-8 [illegible]/8"	ST 410
CLOSURE PLATES	[illegible]	2	3"x1/4"x0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1"x5/8"x6'-8"	ST 402
PATCH PLATES	PP1	12	2"x1/4"x0'-9"	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
COVER PLATES	B	4	9"x.0135"x15'-2"	ST 303
	C	2	9"x.0135"x13'-2 1/2"	ST 303
	D	2	9"x.0135"x2'-1"	ST 303
	J	2	9"x.0135"x13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x1 1/2"x.25"x8"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	B1	5	1" ø x1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2"x3/8"x0'-6 1/2"	ST 400
	P2	4	4 1/2"x.39"x0'-9"	ST 400
	P3	4	4 1/2"x.39"x1'-0"	ST 400
	P9	4	3"x1/2"x1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY

REF. DRWG.

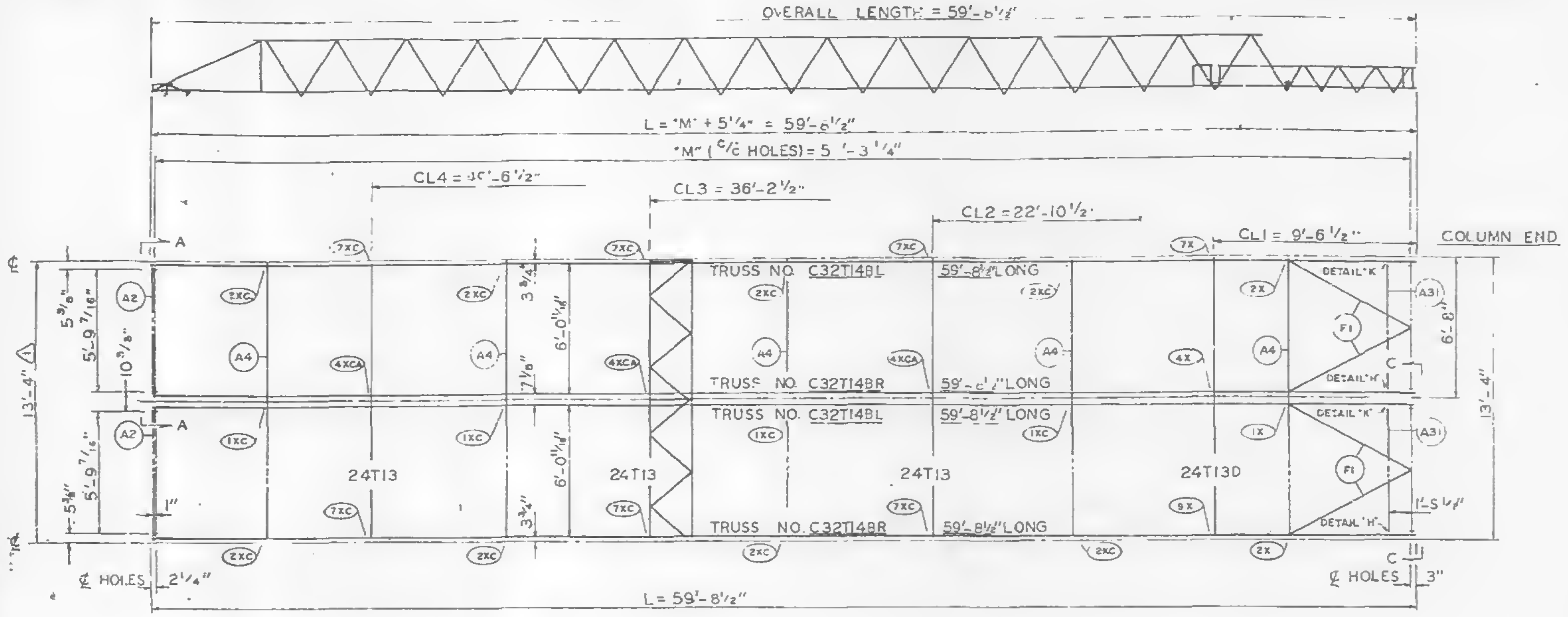
7-AB3-27	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-25	7-22-68
SB-124	3-24-69
7-AB3-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

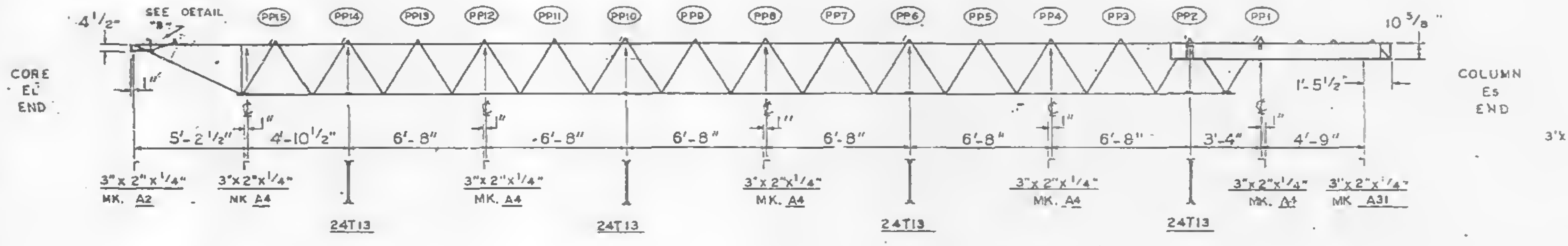
BLDG. B FLOORS 59 & 92 EAST

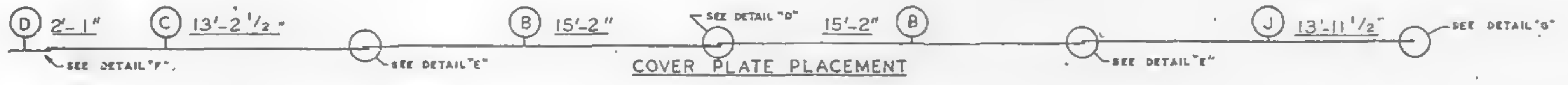
PANEL BR7C-13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO 7-AB3-27	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA — DATE 6/6/69	DRAWN BY [illegible] DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR — DATE	CHECKED BY T.M. CHURA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER	FABRICATION CONT. NO W.T.C. 221	SHEET NO FP BR7C

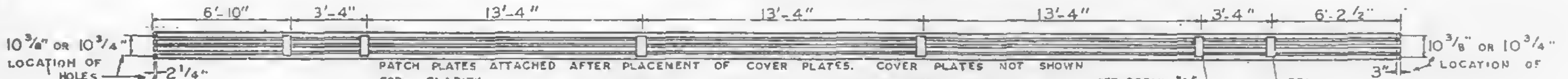


PANEL NO. B78 SIZE 13'-4" x 59'-8½"



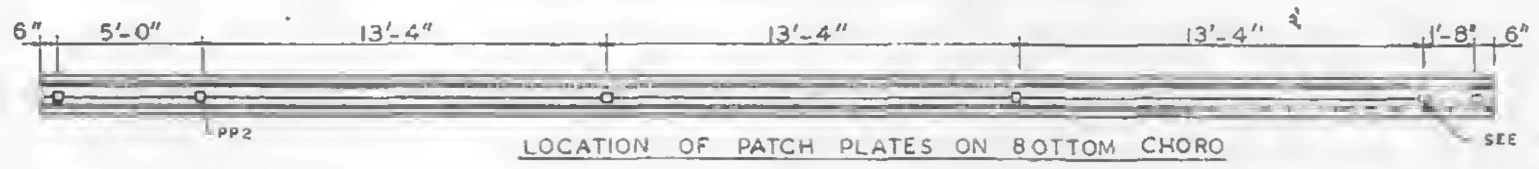


COVER PLATE PLACEMENT

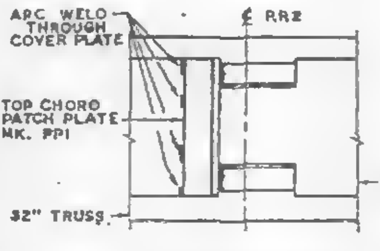


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

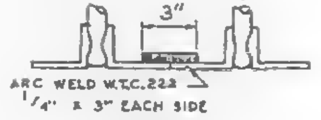
LOCATION OF PATCH PLATES ON TOP CHORD



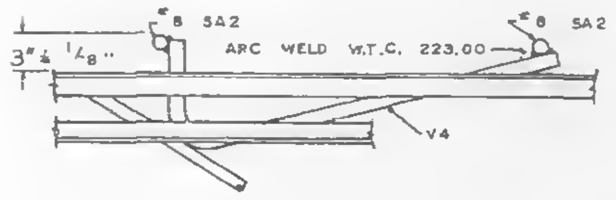
LOCATION OF PATCH PLATES ON BOTTOM CHORD



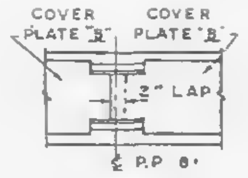
TOP VIEW - DETAIL "A"



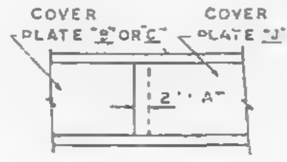
DETAIL "C"



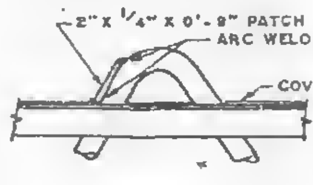
DETAIL "B"



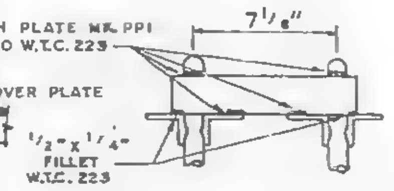
DETAIL "D"



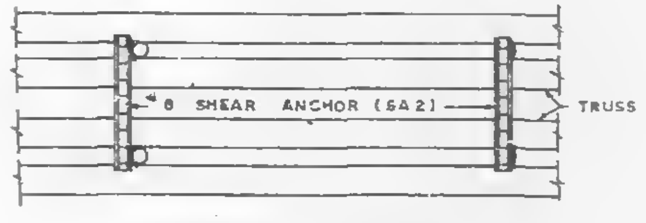
DETAIL "E"



DETAIL "A"

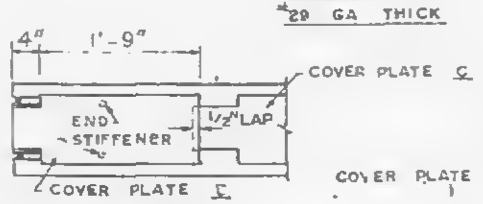


SECTION B-B

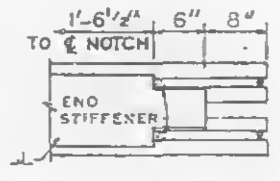


TOP VIEW DETAIL "B"

COVER PLATES #29 GA THICK

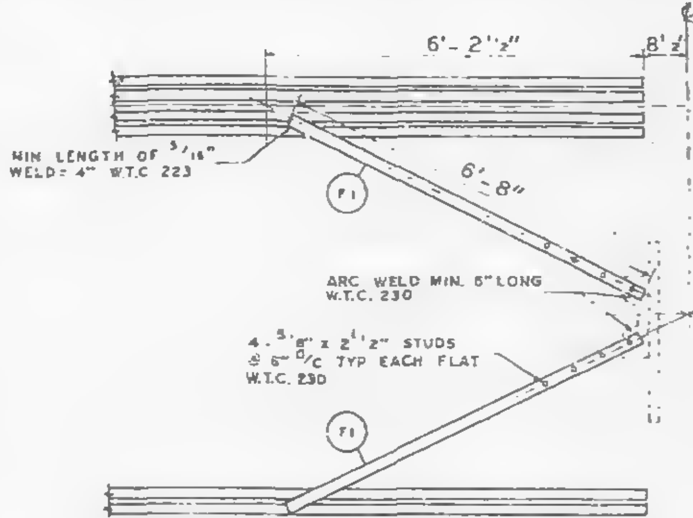


DETAIL "F"

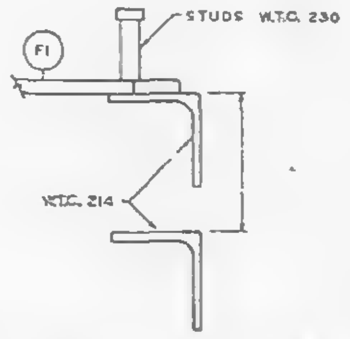


DETAIL "G"

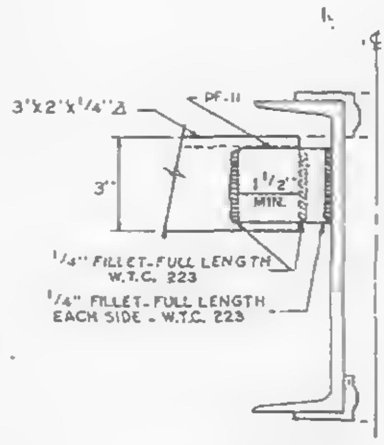
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00


℄ EXT. COL. REF. LINE
6'-2½"
8½"
6'-8"
3'-4"
MIN LENGTH OF 5/16" WELD = 4" W.T.C. 223
F1
ARC WELD MIN. 6" LONG W.T.C. 230
4-⅝" x 2½" STUDS @ 6" C/C TYP EACH FLAT W.T.C. 230

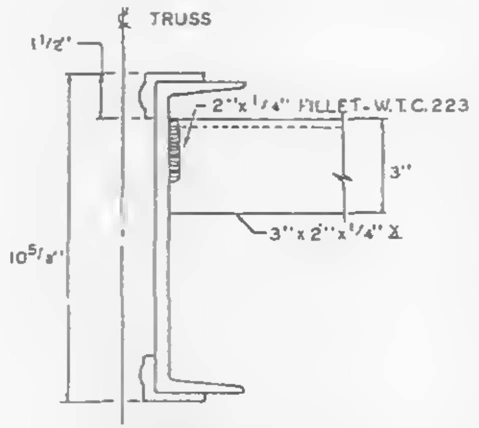
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



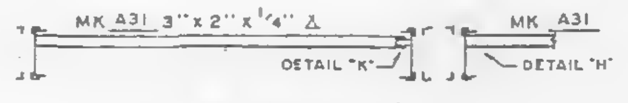
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.


℄ TRUSS
1½"
3"x2"x¼" ∠
PF-11
3"
1½" MIN.
¼" FILLET-FULL LENGTH W.T.C. 223
¼" FILLET-FULL LENGTH EACH SIDE - W.T.C. 223
10⅝"

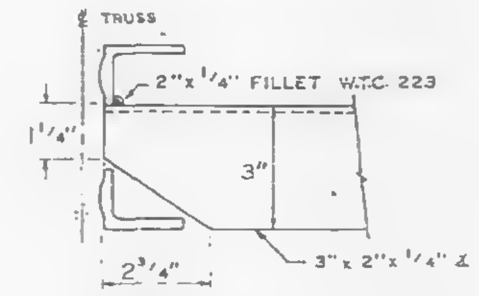
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



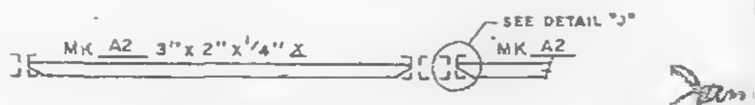
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



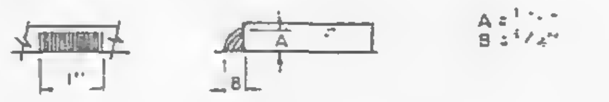
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	2	C32T14BL x 59'-8½"	ST 214BL
	T14BR	2	C32T14BR x 59'-8½"	ST 214BL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	BT 213
	T13D	1	24T13D x 13'-3"	BT 2130
3"x2"x¼" ANGLE	A2	2	3"x2"x¼"x5'-11 9/16"	ST 403
	A4	5	3"x2"x¼"x13'-3"	ST 403
	A31	2	3"x2"x¼"x5'-8⅛"	ST 410
CLOSURE PLATES	PF-11	2	3"x¼" x 0'-2⅜"	ST 4.2
DIAGONAL FLATS	F1	4	1½" x ⅝" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2"x¼" x 0'-9"	ST 400
	PP2	12	3"x⅜" x 0'-3"	ST 400
COVER PLATES	B	4	9"x.0135" x 15'-2"	ST 303
	C	2	9"x.0135" x 13'-2½"	ST 303
	D	2	9"x.0135" x 2'-1"	ST 303
	J	2	9"x.0135" x 13'-11½"	ST 304
ANGLE CLIPS	C1	16	2"x1½"x.25"x6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES ⚠1	P1	4	3½"x⅜"x0'-6½"	ST 400
	P2	3	4½"x.39"x0'-9"	ST 400
	P3	3	4½"x.39"x1'-0"	ST 400
	P9	4	3"x½"x1'-2"	ST 409
	P10	1	4½"x.39"x0'-5"	ST 409
	P11	1	3"x¼"x0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 225.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FULL THROAT FILLET.



NO.	DATE	REVISION	BY
1	5-12-69	AS NOTED	G.D.

REF DRWG.

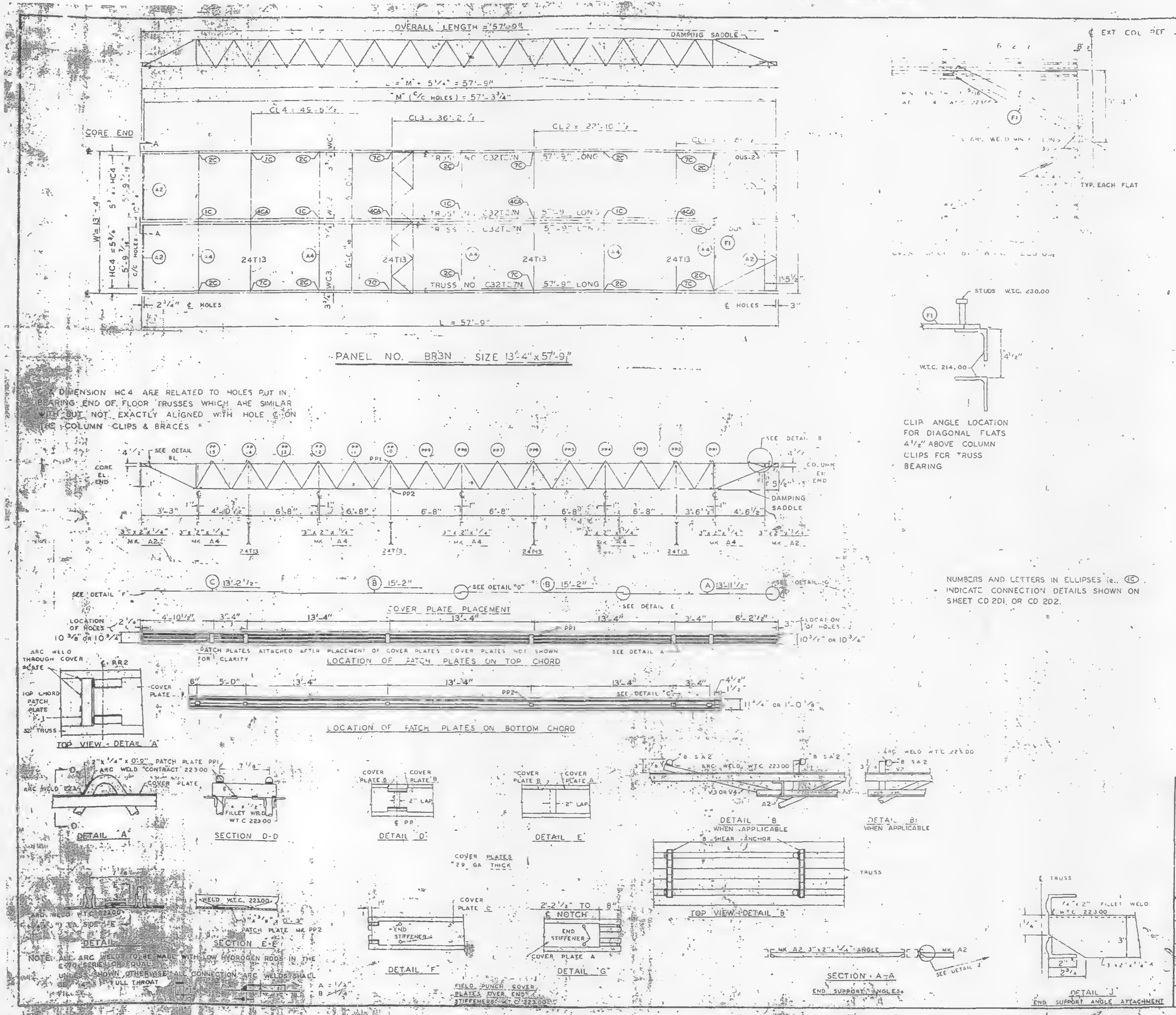
7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SB-124	3-24-69
7-AB3-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 92 (WEST)

PANEL B78 - 13'-4" x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-26 PLATE
APPROVED FOR FABRICATION BY JA (A) LuR FOR P.O.N.Y.A. DATE 6/6/69
DRAWN BY LuR DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP B78



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES (i.e., ⓒ) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET
A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
[illegible] TRUSSES	[illegible]	4	C32T[illegible]N-57'-9	ST2
[illegible]	[illegible]	4	24T[illegible]	BT[illegible]3
[illegible]	A4	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
COVER PLATE	B	4	9" x .0135 x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2 1/2	ST303
ANGLE CLIPS	C	12	2" x 1 5/8" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-3 7/8"	ST298
	DUS-2	[illegible]	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 1/8" x 1'-3"	ST 400
CONNECTION PLATES	P1	8	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-6"	ST 400
	P3	4	4 1/2" x .30" x 1'-0	ST 400

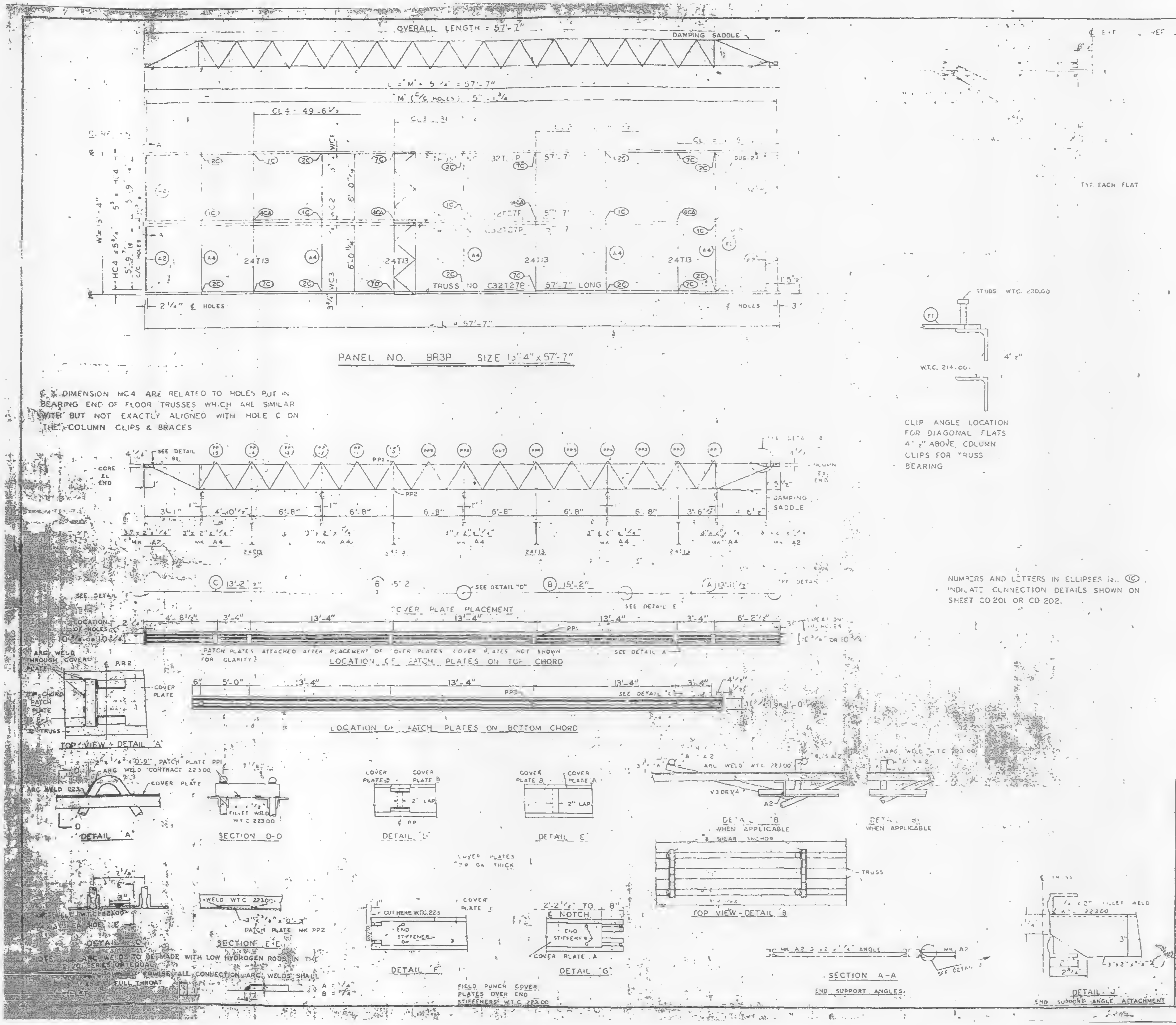
NO.	DATE	REVISION	BY

REF DRWG
7-AB4 [illegible] 10-15-68
7-AB4 5 & [illegible] 7-22-68
7-AB4 42 10-15-68
SA 124 1-6-69
7-AB3 44 1-6-69
7-AB1-24 1-6-69
7-AB4 [illegible] 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER [illegible]
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 44 (EAST)
PANEL BR3N-13'-4" x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-44	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 7/31/69	DRAWN BY [illegible] DATE APRIL 26, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE APRIL 25 1969	IN CHARGE OF PROD. DIV.
LACLEDE STEEL CO. DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET FP BR3N



PANEL NO. BR3P SIZE 13'-4" x 57'-7"

℄ X DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NOTES: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL. UNLESS NOTED OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT

A = 1/4"
B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
[illegible]	[illegible]	4	C32T[illegible]	ST2[illegible]
[illegible]	[illegible]	[illegible]	24T[illegible] 13 [illegible]	ST[illegible]3
[illegible] PLATES	B	4	9' x 0135" x 15'-2"	ST303
	C	2	9' x 0135" x 13'-2 1/2"	ST303
[illegible]	[illegible]	12	2' x 1' 2' x 3/4" x 0'-6"	ST 400
[illegible] SHEAR [illegible]	[illegible]-2	8	#8 REBAR x 0'-9"	ST 400
[illegible]	[illegible]	[illegible]	[illegible] x 3/8" x [illegible] 7/8"	ST294
	[illegible]2	[illegible]	3 1/2 x 3 1/2 x 3/8 x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	[illegible] x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	4	4 1/2" x .30" x 1'-[illegible]	ST 400

NO	DATE	REVISION	

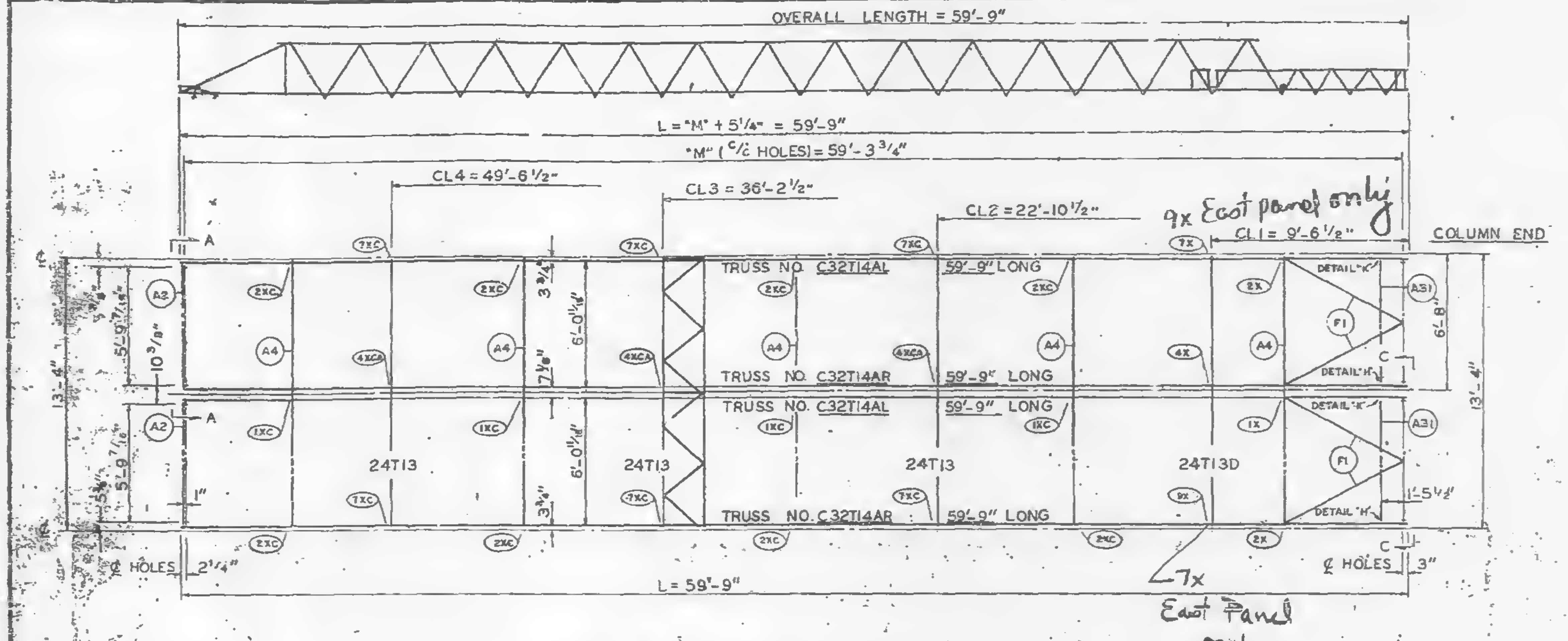
REF. DRWS
7-[illegible]-42 10-15-68
[illegible] 5 & 16 7-22-68
7-[illegible]-42 10-15-68
5A-[illegible]4 1-6-69
7-A53-44 1-6-69
7-[illegible]-24 1-6-69
[illegible]-8 7-22-68

FLOOR PANEL DETAILS
[illegible]
WORLD TRADE CENTER [illegible]
FOR
THE PORT OF NEW YORK AUTHORITY

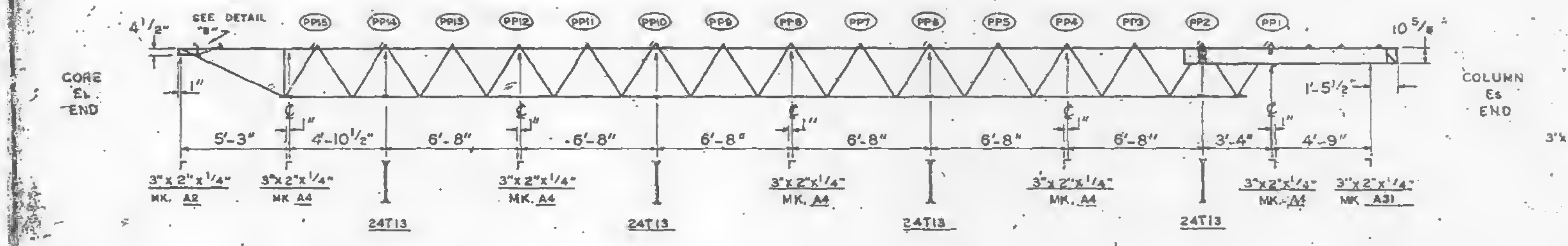
BLDG. A FLOORS 78 (NORTH)
PANEL BR3P 13'-4" x 57'-7"
BLDG. B FLOORS 78 (WEST)

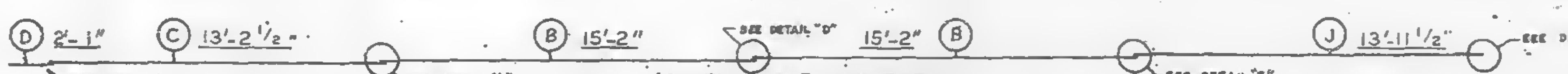
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A53-44	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 7/3/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF [illegible]
DETAILED BY A. C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET FB 8[illegible]

LACLEDE STEEL CO.

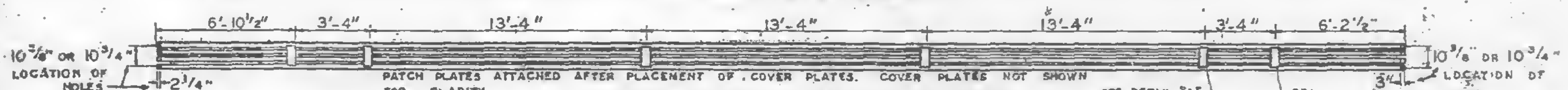


PANEL NO. B7A SIZE 13'-4" x 59'-9"



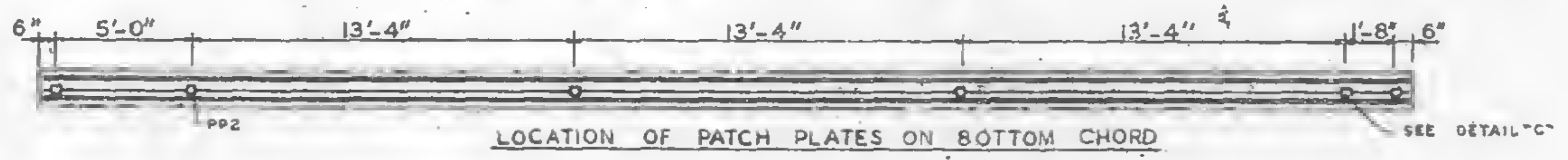


COVER PLATE PLACEMENT

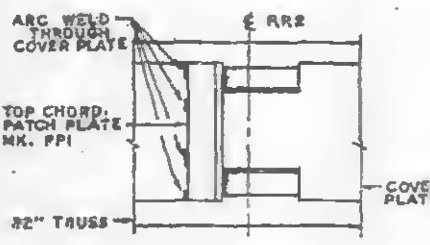


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

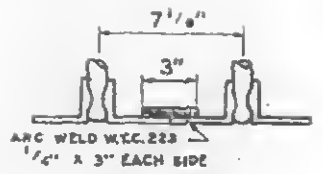
LOCATION OF PATCH PLATES ON TOP CHORD



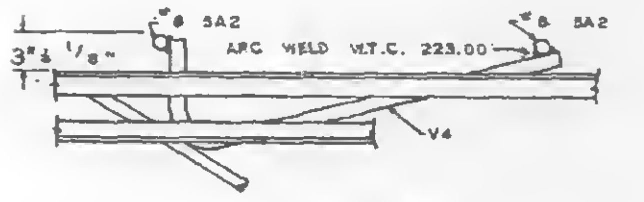
LOCATION OF PATCH PLATES ON BOTTOM CHORD



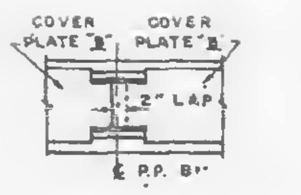
TOP VIEW - DETAIL "A"



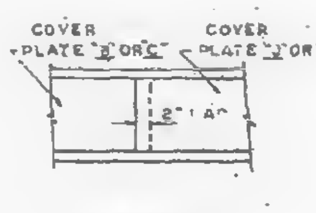
DETAIL "C"



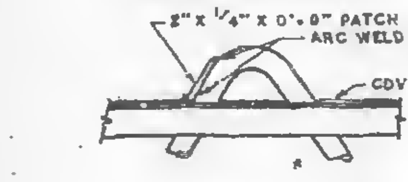
DETAIL "B"



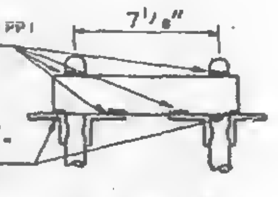
DETAIL "D"



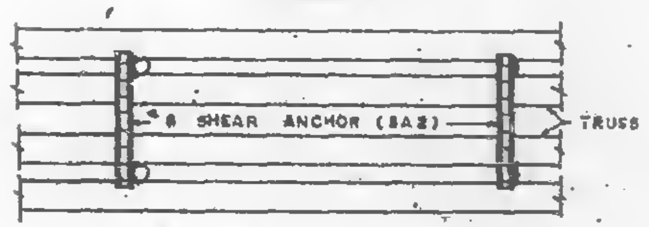
DETAIL "E"



DETAIL "A"

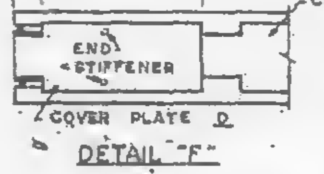


SECTION B-B

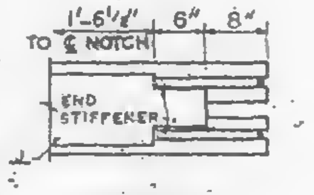


TOP VIEW DETAIL "B"

COVER PLATES 29 GA THICK

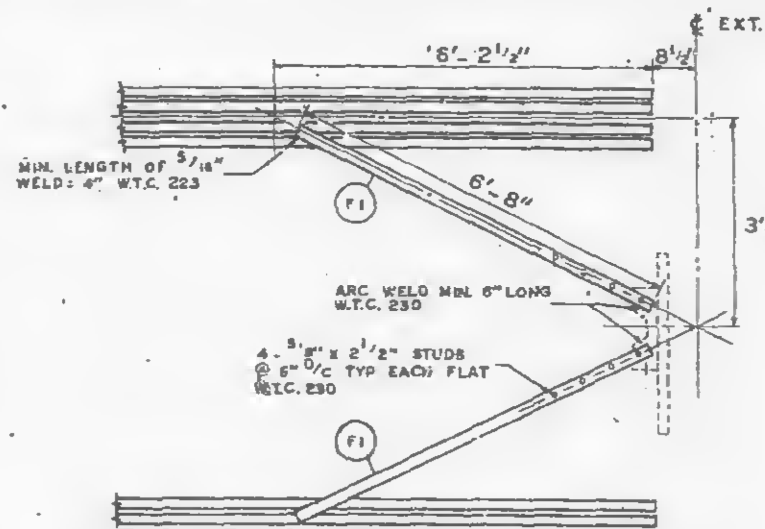


DETAIL "F"

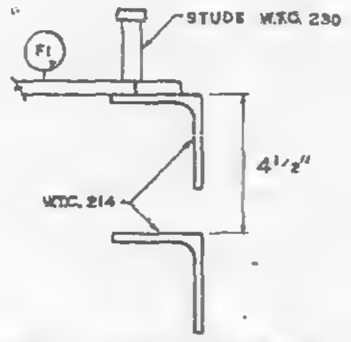


DETAIL "G"

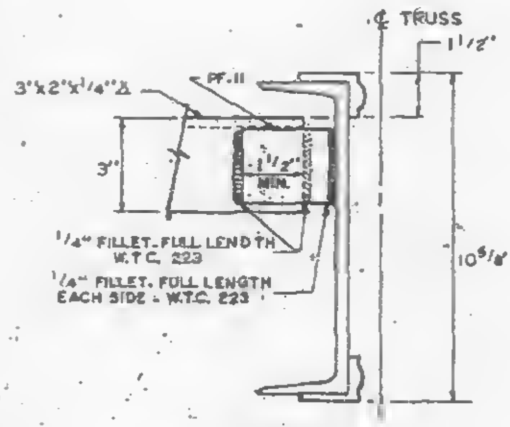
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/2"
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223
F1
6'-8"
3'-4"
ARC WELD MIN. 6" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230

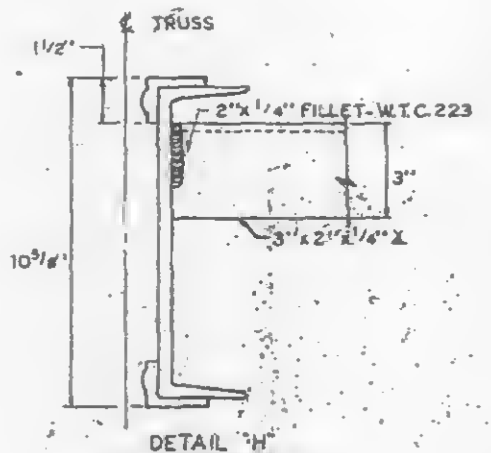
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



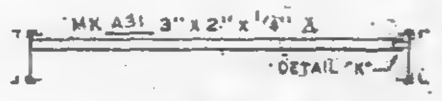
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.


℄ TRUSS
1 1/2"
3"x2"x1/4" ∠
PF-11
3"
1 1/2" MIN.
1/4" FILLET, FULL LENGTH W.T.C. 223
1/4" FILLET, FULL LENGTH EACH SIDE - W.T.C. 223
10 5/8"

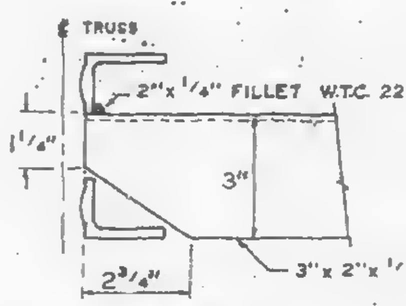
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



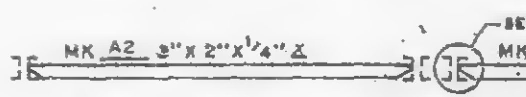
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14AL	2	C32T14AL x 59'-9"	ST 214AL
	T14AR	2	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-8 1/3"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-8"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/2"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x 1 1/2"x .25"x 8"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES ⚠1	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	3 * 4	4 1/2" x .39" x 0'-9"	ST 400
	P3	3 * 4	4 1/2" x .39" x 1'-0"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 4[illegible]
	P10	1 *	4 1/2" x .39" x 0'-5"	ST 4[illegible]
	P11	1 *	3" x 1/4" x 0'-6"	ST 40[illegible]

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

Material marked * is for West panel only

NO.	DATE	REVISION	BY
⚠1	5-12-69	AS NOTED	G.D.

SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED, AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 6/6/69 By SK

REF DRWG.		
	7-A93-28	10-4-68
	7-A81-13	10-4-68
	7-A82-8	7-22-68
	7-A84-28	7-22-68
	SB-124	3-24-69
	7-A83-24	8-15-68

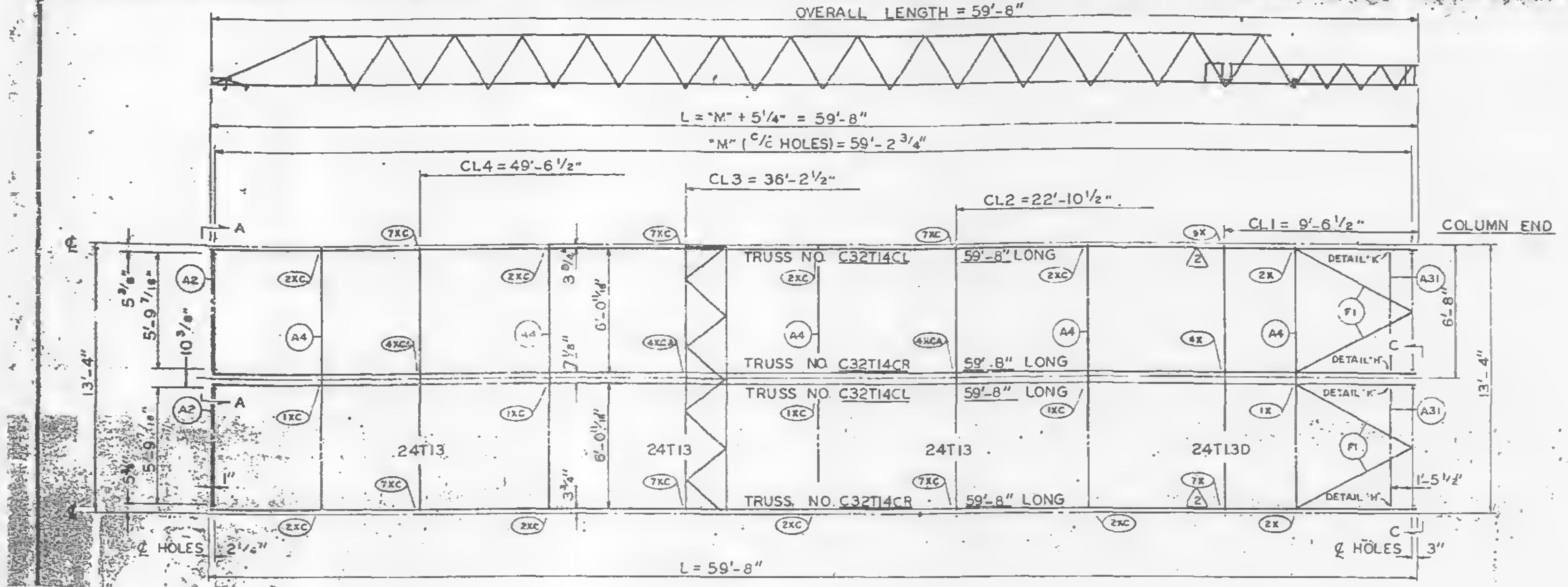
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

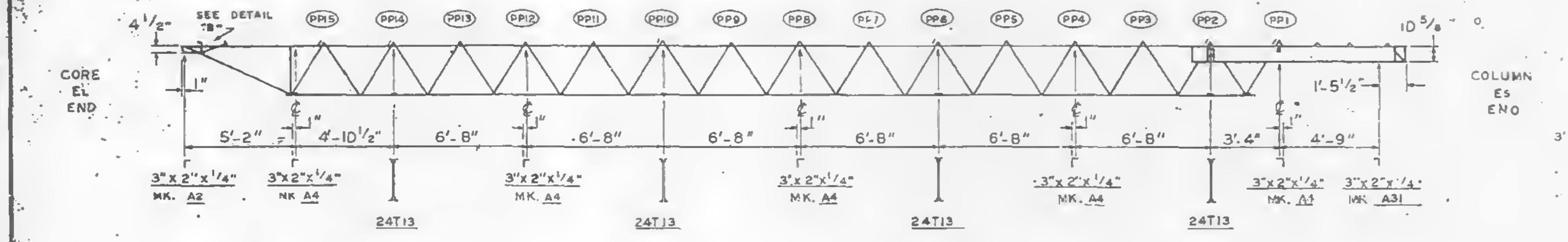
PANEL B7A - 13'-4" x 59'-9"

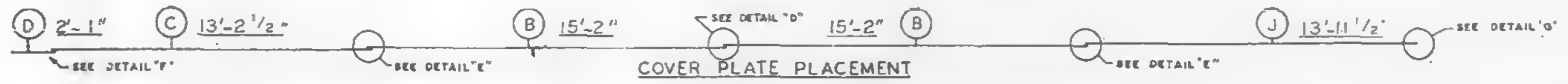
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-28	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY Luk DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR [redacted]	DATE	CHECKED BY T.M. CHURA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B7A

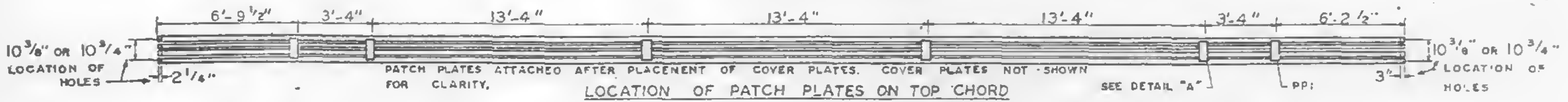


PANEL NO. B7C SIZE 13'-4" x 59'-8"



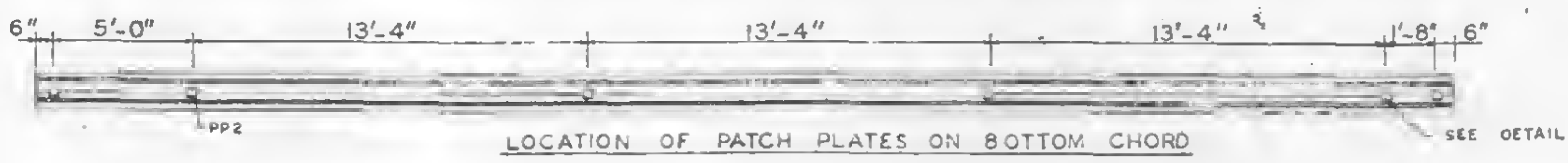


COVER PLATE PLACEMENT

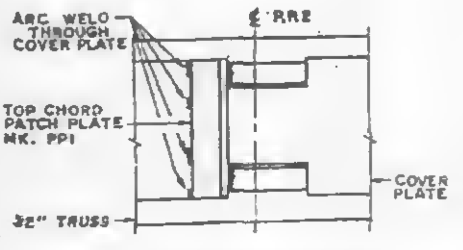


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

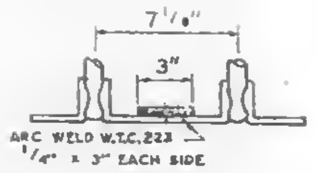
LOCATION OF PATCH PLATES ON TOP CHORD



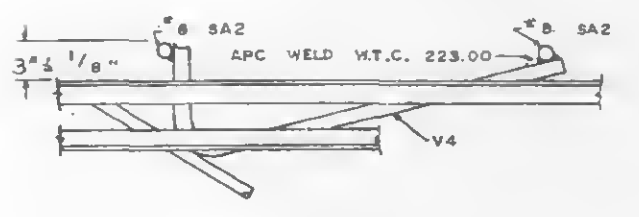
LOCATION OF PATCH PLATES ON BOTTOM CHORD



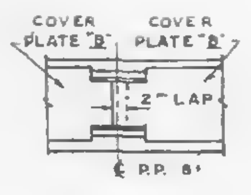
TOP VIEW - DETAIL "A"



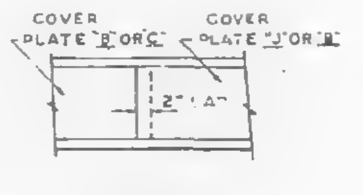
DETAIL "C"



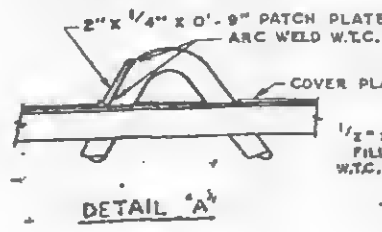
DETAIL "B"



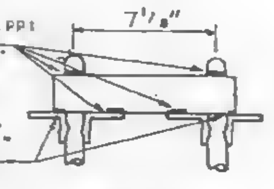
DETAIL "D"



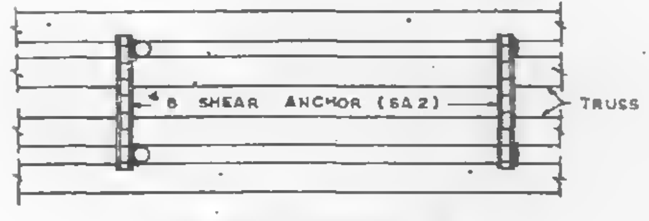
DETAIL "E"



DETAIL "A"

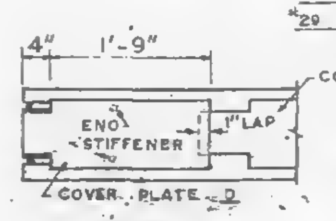


SECTION B-B

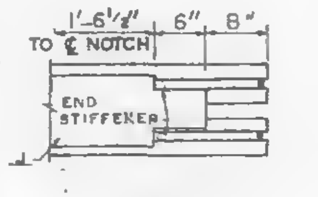


TOP VIEW DETAIL "B"

COVER PLATES #29 GA THICK

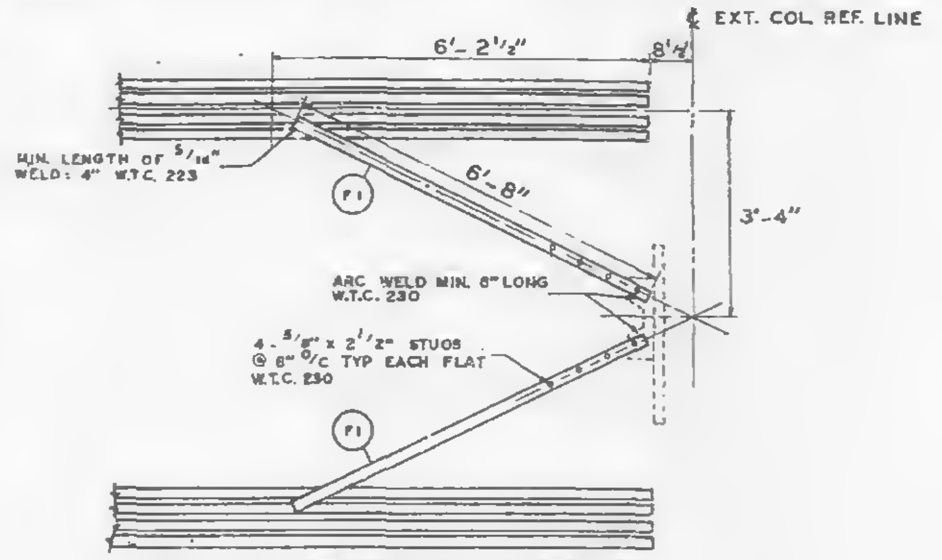


DETAIL "F"

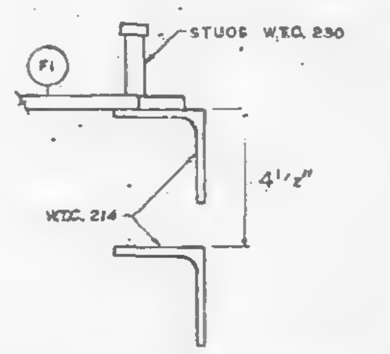


DETAIL "G"

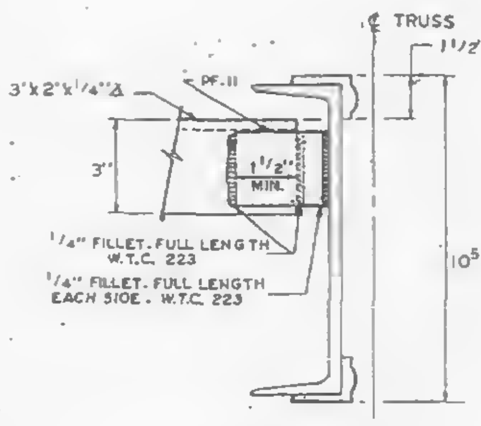
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00


℄ EXT. COL. REF. LINE
6'-2 1/2"
8 1/4"
3'-4"
6'-8"
F1
F1
MIN. LENGTH OF 5/16" WELD: 4" W.T.C. 223
ARC WELD MIN. 6" LONG W.T.C. 230
4-5/8" x 2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230

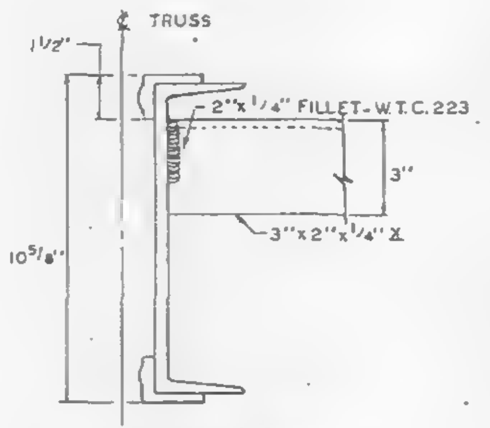
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



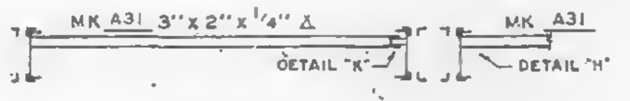
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.


℄ TRUSS
1 1/2"
3"x2"x1/4" ∠
PF.11
3"
1 1/2" MIN.
1/4" FILLET. FULL LENGTH W.T.C. 223
1/4" FILLET. FULL LENGTH EACH SIDE. W.T.C. 223
10 5/8"

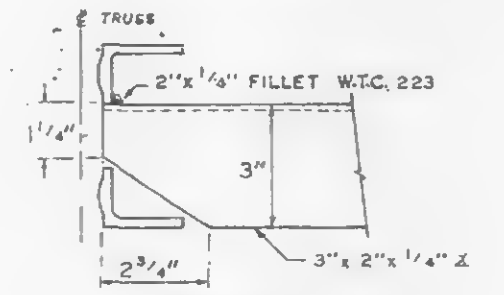
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



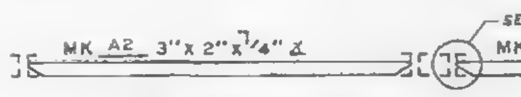
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



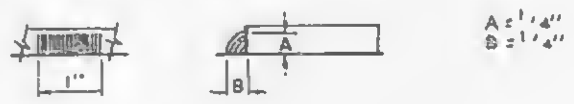
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x2"x1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-8 1/2"	ST 410
CLOSURE PLATES	PF-11	2	3"x1/4"x0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST 402
PATCH PLATES	PP1	12	2"x1/4"x0'-9"	ST 400
	PP2	12	3"x3/8"x0'-3"	ST 400
COVER PLATES	B	4	9"x.0135"x15'-2"	ST 303
	C	2	9"x.0135"x13'-2 1/2"	ST 303
	D	2	9"x.0135"x2'-1"	ST 303
	J	2	9"x.0135"x13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x1 1/2"x.25"x6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES ⚠2	P1	4	3 1/2"x3/8"x0'-6 1/2"	ST 400
	P2	4	4 1/2"x.39"x0'-9"	ST 400
	P3	4	4 1/2"x.39"x1'-0"	ST 400
	P9	4	3"x1/2"x1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.



A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY
⚠2	6-16-69	AS NOTED	G.D.C.
1	5-12-69	AS NOTED	G.D.

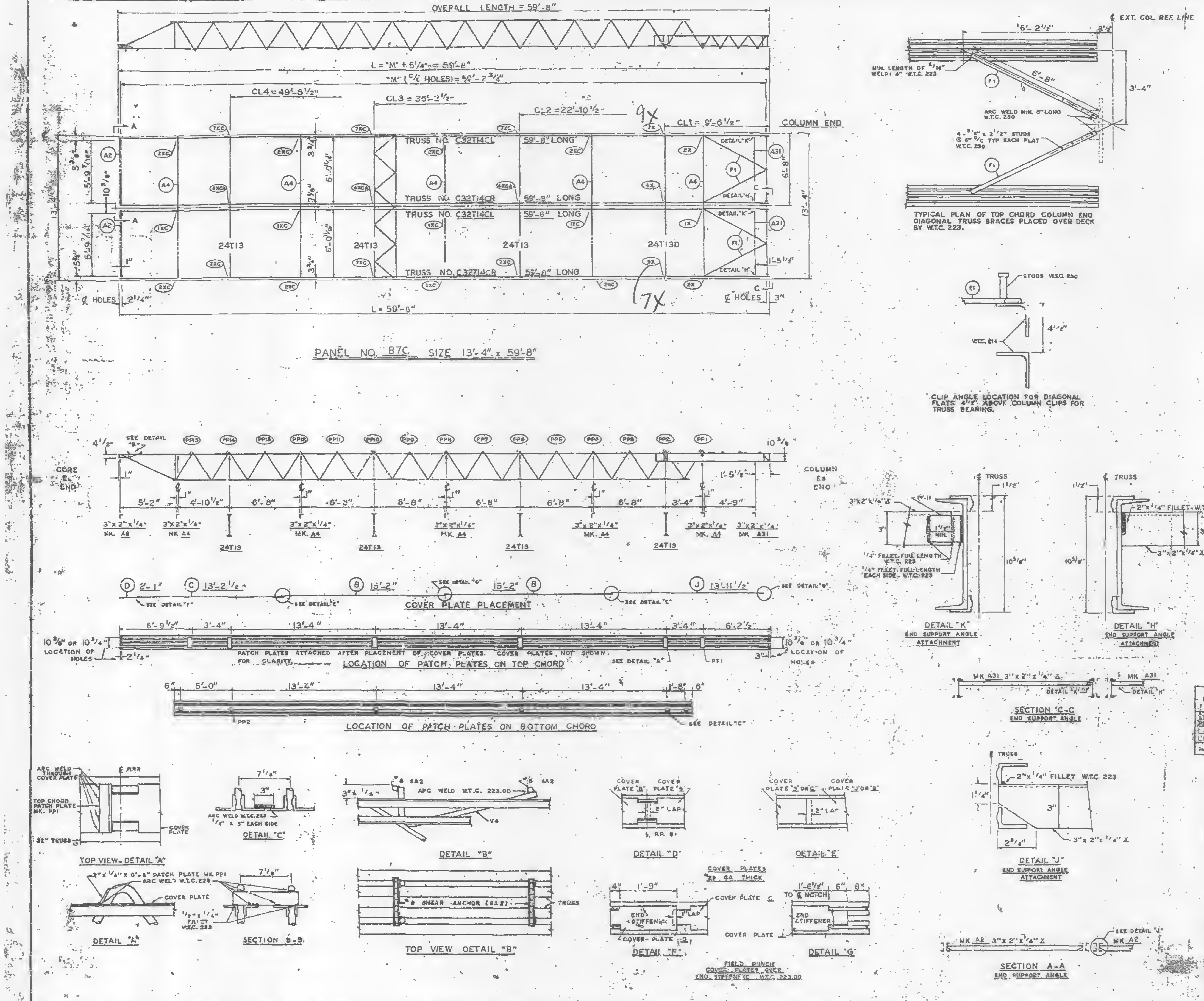
REF DRWG.		
	7-A83-26	10-4-68
	7-A81-13	10-4-68
	7-A82-8	7-22-68
	7-A84-28	7-22-68
	SB-124	3-24-69
	7-A83-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 8 FLOORS 59 & 92 (EAST)

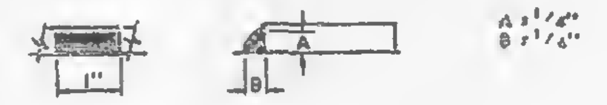
PANEL B7C - 13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-28 PLATE 2
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 7/28/69
DRAWN BY DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.N. CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY
FABRICATION CONT NO W.T.C. 221
SHEET NO FP B7C


OVERALL LENGTH = 59'-8"
L = "M" + 5 1/4" = 59'-8"
"M" (C/L HOLES) = 59'-2 3/4"
CL4 = 49'-6 1/2"
CL3 = 35'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/8"
9X
7X
COLUMN END
TRUSS NO. C32T14CL 59'-8" LONG
TRUSS NO. C32T14CR 59'-8" LONG
24T13
24T13D
DETAIL "K"
DETAIL "H"
℄ HOLES
L = 59'-8"
13'-4"
PANEL NO. B7C SIZE 13'-4" x 59'-8"
CORE ℄ END
COLUMN ℄ END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON BOTTOM CHORD
℄ EXT. COL. REF. LINE
6'-2 1/2"
6'-8"
3'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION "C-C" END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW-DETAIL "A"
DETAIL "C"
DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW DETAIL "B"
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENER W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
				1
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x 2"x 1/4"x 5'-11 5/16"	ST 403
	A4	5	3"x 2"x 1/4"x 13'-3"	ST 403
	A31	2	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2"x 1/4" x 0'-9"	ST 400
	PP2	12	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/2"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x 1 1/2"x .25"x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2"x 3/8"x 0'-8 1/2"	ST 400
	P2	3	4 1/2"x .39"x 0'-9"	ST 400
	P3	3	4 1/2"x .39"x 1'-0"	ST 400
	P9	4	3"x 1/2"x 1'-2"	ST 409
	P10	1	4 1/2"x .39"x 0'-5"	ST 409
△1	P11	1	3"x 1/4"x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 239.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



NO.	DATE	REVISION	BY
1	5-12-69	AS NOTED	G.D.

SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 6/6/69 By SK

REF. DRWG.		
	7-AB3-26	10-4-68
	-AB1-13	10-4-68
	7-AB2-8	7-22-68
	7-AB4-2*	7-22-68
	30-124	3-24-69
	7-AB3-24	8-15-68

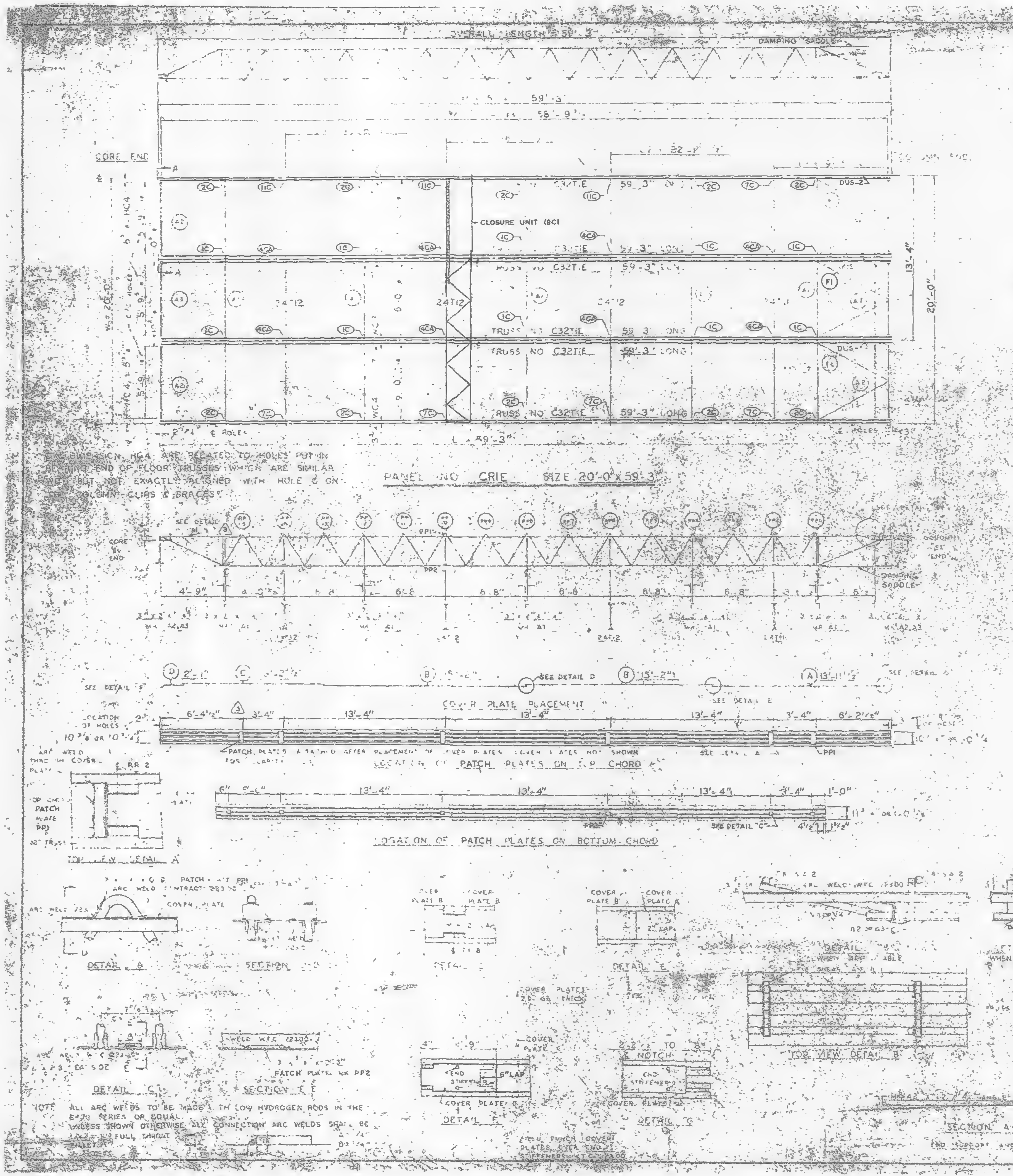
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 59 & 92 (EAST)

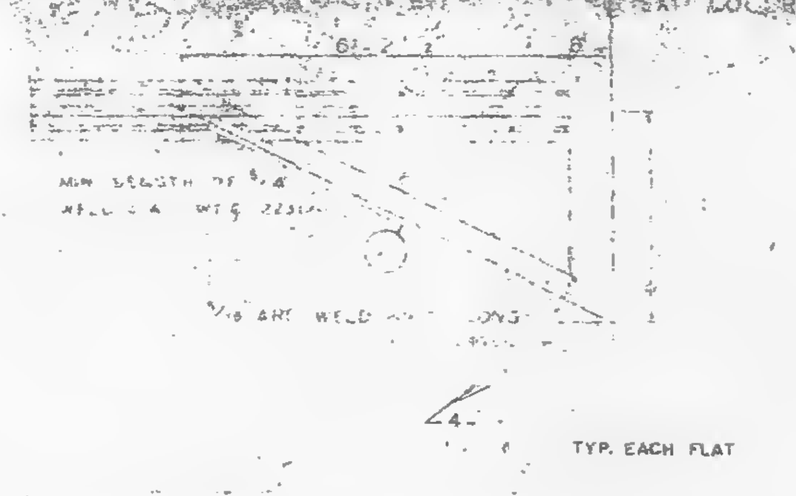
PANEL B7C - 13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY

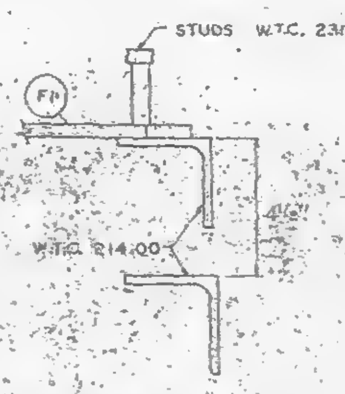
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-26	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY L.H. DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DET[redacted]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B7C



DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL PLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	DWG.
FLOOR TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING TRUSSES	[illegible]		[illegible]	
	[illegible]	3	[illegible]	ST 212
	A1	5	[illegible]	ST 403
[illegible] ANGLE	[illegible]	4	[illegible]	ST 403
	[illegible]	3	[illegible]	ST 403
[illegible]	[illegible]	[illegible]	[illegible]	ST 402
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible]	ST 400
CLIP PLATES	[illegible]	3	[illegible]	[illegible]
	[illegible]	6	[illegible]	[illegible]
	[illegible]	3	[illegible]	[illegible]
		3	[illegible] 2'-1"	[illegible]
ANGLE CLIPS		21	[illegible]	ST 400
# 8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-0"	ST 400
DAMPING SADDLE	DUS	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS 2	1	3 1/2 x 3 1/2 x 3/8 x 3'-6 7/8	ST 298
CONNECTION BAR	CB1	4	1 3/4 x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 ⊏ 1 1/2" x 1 1/4" x 230 x 6'-6 1/2"	BT 212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	2	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
3	6-9-69	AS NOTED	G.D.C.
2	10-16-68	MAT'L LIST	G.D.C.
1	7-17-68	GENERAL	[illegible]

[illegible]	10-15-68
[illegible]	7-22-68
[illegible]	7-24-68
SA 24	1-6-69
[illegible]	[illegible]
[illegible]	7-22-68
[illegible] 402 6 & 7	7-22-68
[illegible] 384-42	10-15-68

N.Y.C.

10-11 (SOUTH)

PANEL CRIE

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

James White

FOR PONYA

DATE 1/2/70

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

DESIGN DRAWING NO. 7 383 B 4-1-68

DRAWN BY [illegible]

DATE APRIL 10, 1968

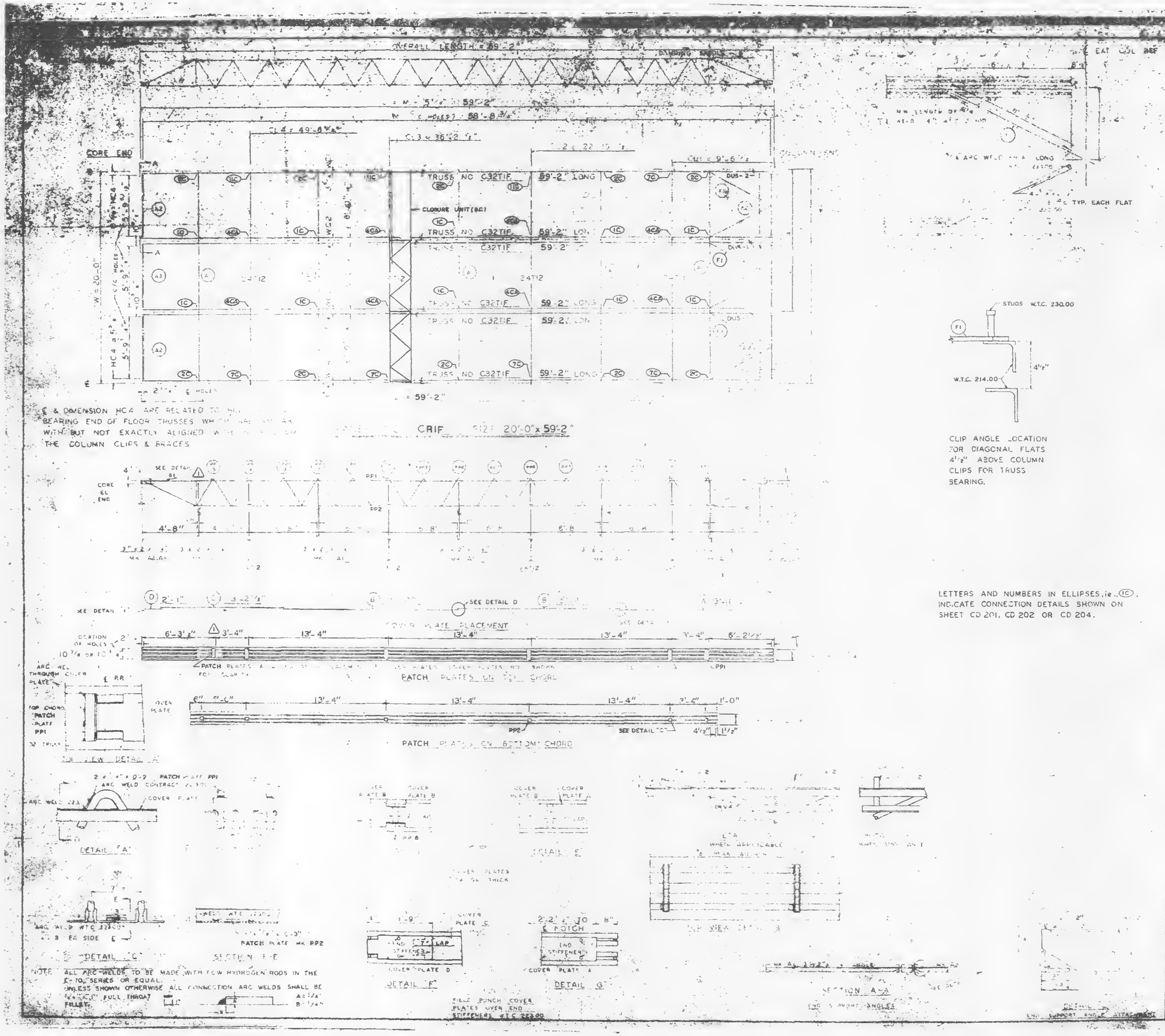
CHECKED BY J.B. PAUL

DATE APRIL 10, 1968

IN CHARGE OF PROD. DEV.

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. CRIE



€ & DIMENSION HC4 ARE RELATED TO [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE [illegible] WITH BUT NOT EXACTLY ALIGNED WITH [illegible] THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘ1C, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET. A = 3/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1F	6	C32T1F + 59'-2"	ST201F
BRIDGING TRUSSES	T1	1	24T11 - 19'-11"	BT211
	T2	3	24T12 - 19'-11"	BT212
3 x 2" x 1/4" ANGLE	A1	5	3 x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3 x 2" x 1/4" x 5'-11 9/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	[illegible]	ST 400
[illegible]	A	3	.135" x 13'-[illegible]	ST303
	B	6	.135" x 15'-2"	ST303
	C	3	.135" x [illegible] 2 1/2"	ST303
	D	3	.135" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-5	ST 400
SHEAR ANCHOR	S	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-8 7/8"	ST298
	DUS-2	[illegible]	[illegible] x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 1/4" x 1'-2"	ST 400
CLOSURE UNIT	BC	3	2 L 1 1/2" x 1 1/4" x .230 x 6'-6 1/2"	BT212 CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

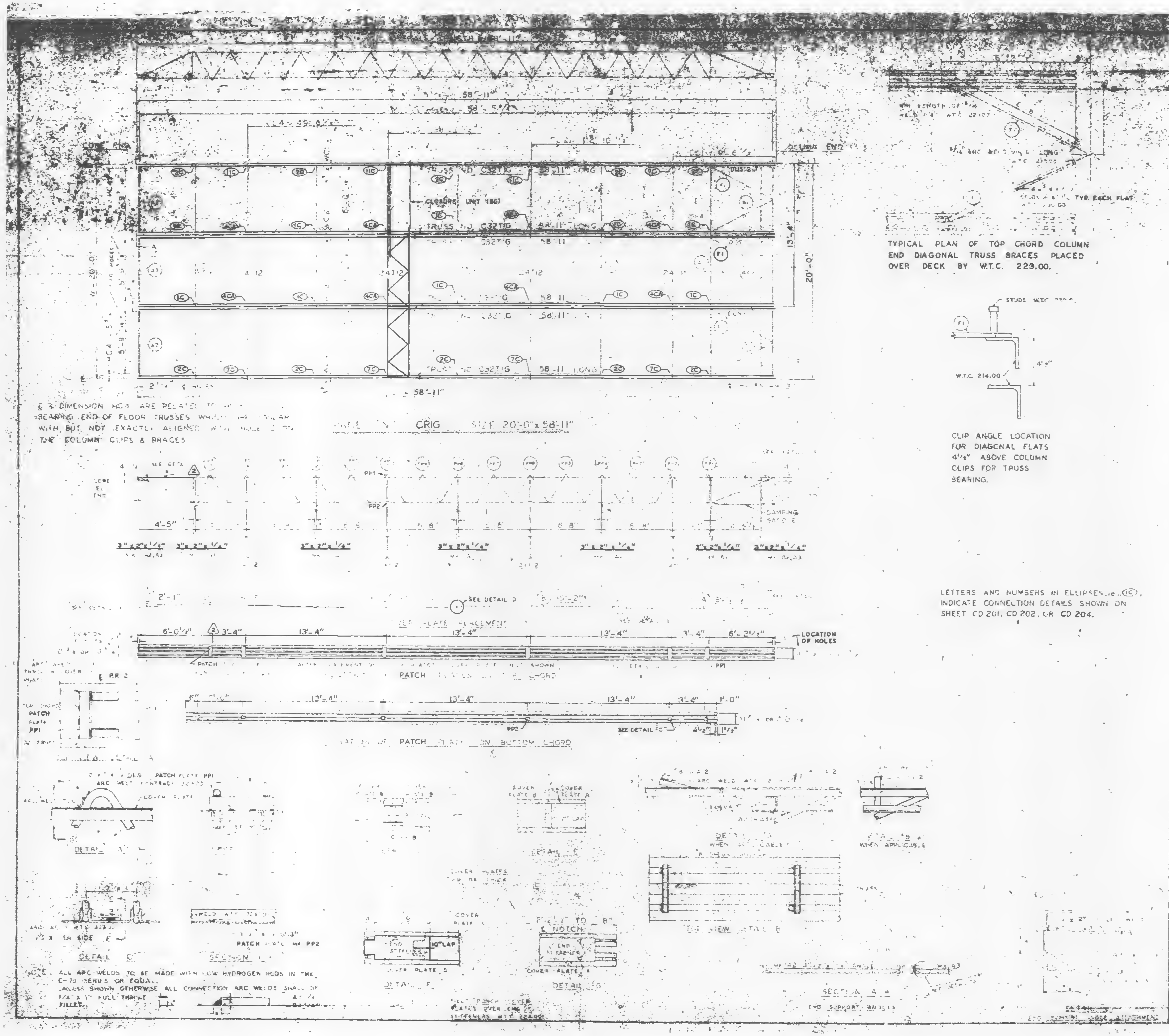
NO.	DATE	REVISION	BY
⚠1	6-9-69	AS NOTED	G.D.C.

⚠1

[illegible]	10-15-68
[illegible] 5,15 & 39	7-22-68
[illegible] 84 41	7-22-68
[illegible]	1-6-69
[illegible]	[illegible]
[illegible]	7-22
[illegible]	7-22-68
[illegible] 184 42	10-15-68

47-48 (S) 47-48, 70-71 (N)
PANEL CRIF [illegible] x 59'-2"
BLDG. B FLOORS 47-48 (EAST & WEST) 70-71 (WEST) ⚠1

FABRICATED BY [illegible] STEEL COMPANY
MADISON, ILLINOIS
DESIGN DRAWING NO. 7-483 B
PLATE
APPROVED FOR FABRICATION FOR [illegible] James White DATE 1/2/70
DRAWN BY [illegible] DATE OCT. 23, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M.CHURA DATE OCT. 23, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. CRIF



⊈ & DIMENSION HC4 ARE RELATED TO THE BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH ⊈ OF THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NOTE. ALL ARC-WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

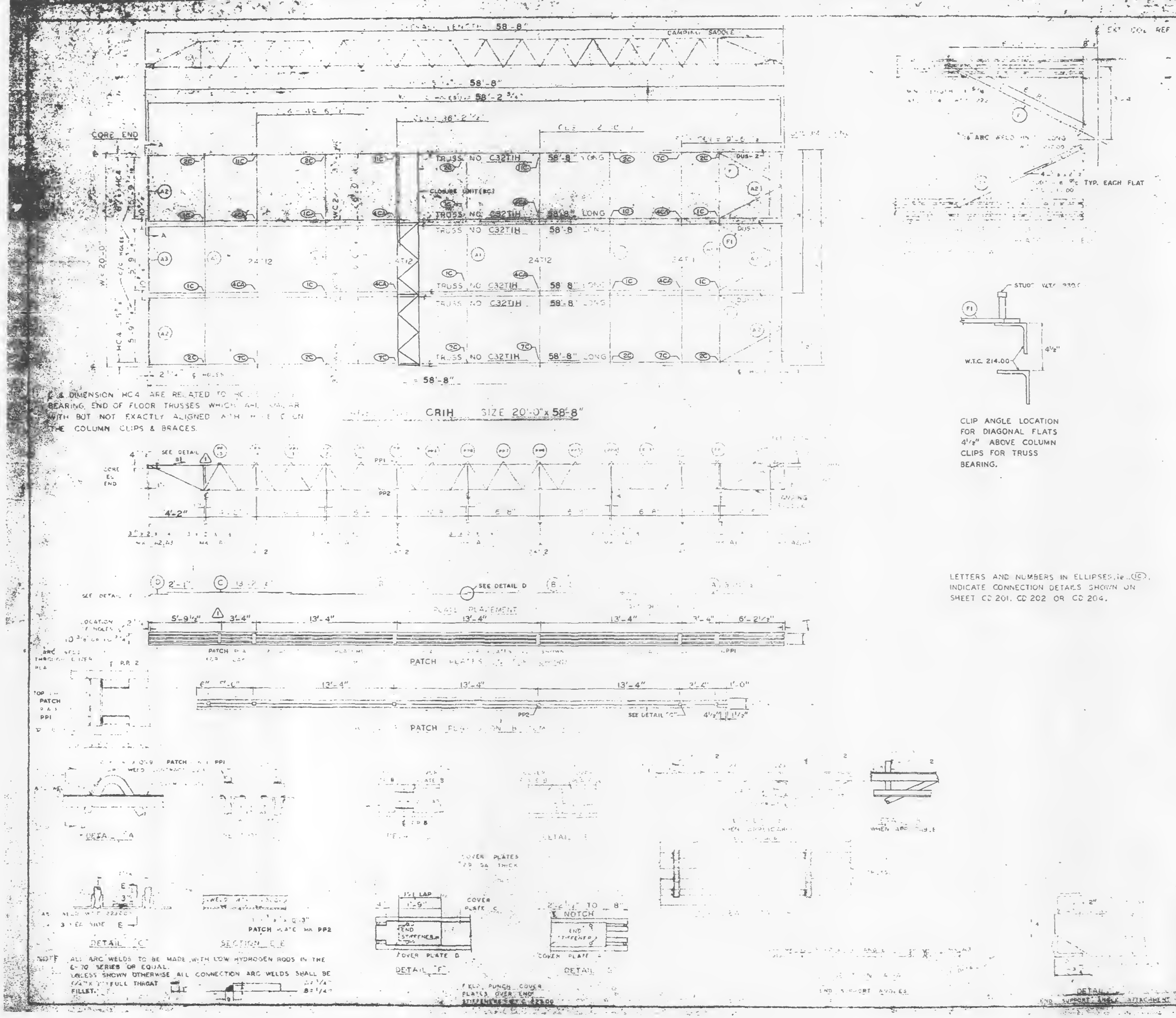
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	REQ'D	SIZE	
FLOOR TRUSSES	TIG	6	C32TIG - 58'-11"	ST 2016
BRIDGING TRUSSES	T11	3	24T11 - 19'-11"	BT 2113
	T12	3	24T12 - 19'-11"	BT 212
3 1/2" x 2 1/2" ANGLE	A1	8	[illegible]	ST 403
	A2	4	[illegible]	ST 403
	A3	2	[illegible]	ST 403
DIAGONAL FLATS	F1	6	[illegible]	ST 402
PATCH PLATES	PP1	18	[illegible] - 0'-9"	ST 400
	PP2	18	[illegible] - 0'-3"	ST 400
[illegible]	[illegible]	3	[illegible]	[illegible]
	[illegible]	6	[illegible]	[illegible]
	[illegible]	1	[illegible]	[illegible]
	[illegible]	3	[illegible] 2'-1"	[illegible]
ANGLE [illegible]	[illegible]	21	[illegible]	ST 400
[illegible]	SA2	3	[illegible] 0'-8"	ST 400
[illegible]	[illegible]	2	[illegible]	[illegible]
	[illegible]	1	[illegible] 6 7/8	[illegible]
CONNECTION BAR	CB1	4	[illegible] 1'-3"	ST 400
CLOSURE UNIT	BC	3	[illegible]	[illegible]
			230 x 5'- 0 1/2"	[illegible]
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO	DATE	REVISIONS	BY
2	6-9-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	[illegible]

10-15-68
7-22-68
7-22-68
7-6-69
AB3-2
7-22-68
7-22-68
AB4-4
10-15-68

BUILDING 39 (NORTH & SOUTH) 40 (SOUTH) 10-11 (NORTH)
FLOOR PANE CRIG 20'-0" x 58'-11"
BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) 2

FABRICATION BY [illegible] COMPANY
MADISON, [illegible]
DESIGN DRAWING NO. 7-493 B
APPROVED FOR FABRICATION James White DATE 1/2/70
DRAWN BY [illegible] DATE APRIL 10, 1968
CHECKED BY J.R. PAUL DATE APRIL 10, 1968
IN CHARGE PROD. DEV.
FABRICATION CONT. NO. 221
SHEET NO. FP CRIG



C & DIMENSION HC4 ARE RELATED TO HOLES AT BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x [illegible] FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	IH	5	C32TIH - 58'-8"	ST201H
[illegible] TRUSSES	T12	1	24" [illegible] 1"	BT211
	T12	3	24T12 - 19'-11"	BT212
3 x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3 x 2" x 1/4" x 5'-11 9/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	5	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
[illegible] ER [illegible]	[illegible]	3	[illegible] x 0.35 x 13'-11 1/2	ST 303
	[illegible]	6	[illegible] x 13'-2	ST 303
	C	3	[illegible] x 0.35" x 13'-2 1/2	ST 303
	[illegible]	3	[illegible] x 0.35 x 2'-1"	ST 303
ANGLE [illegible]	[illegible]	21	[illegible] x 0'-6	ST 400
[illegible] SHEAR [illegible]	SAR	9	[illegible] REBAR x 0'-2"	ST 400
DAMPING [illegible]	[illegible]	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	[illegible]	[illegible]	[illegible] x 3/8 x 3'-6 7/8	ST 298
CONNECTION BAR	CB1	4	1 [illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 [illegible] 1 1/2 x 1 1/4 x	BT 212
			230 x 6'-6 1/2"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

△1	6-9-69	AS NOTED	G.D.C.
NO.	DATE	REVISION	[illegible]

△1

10-15-68
[illegible] 6 & 39 7-22-68
41 7-22-68
1-6-69
7-22-68
7-22-68
[illegible] 42 10-15-68

79-80 (N)

CRIH [illegible] x 58'-8"

BLDG. B FLOORS 79-80 (WEST). △1

[illegible] COMPANY

DESIGN DRAWING NO [illegible] 483 B
PLATE

MADISON, ILLINOIS

James White FOR [illegible] 1/2/70

DRAWN BY [illegible]
DATE OCT. 23, 1968

APPROVED FOR FABRICATION
BY [illegible] FOR FABRICATOR
DATE

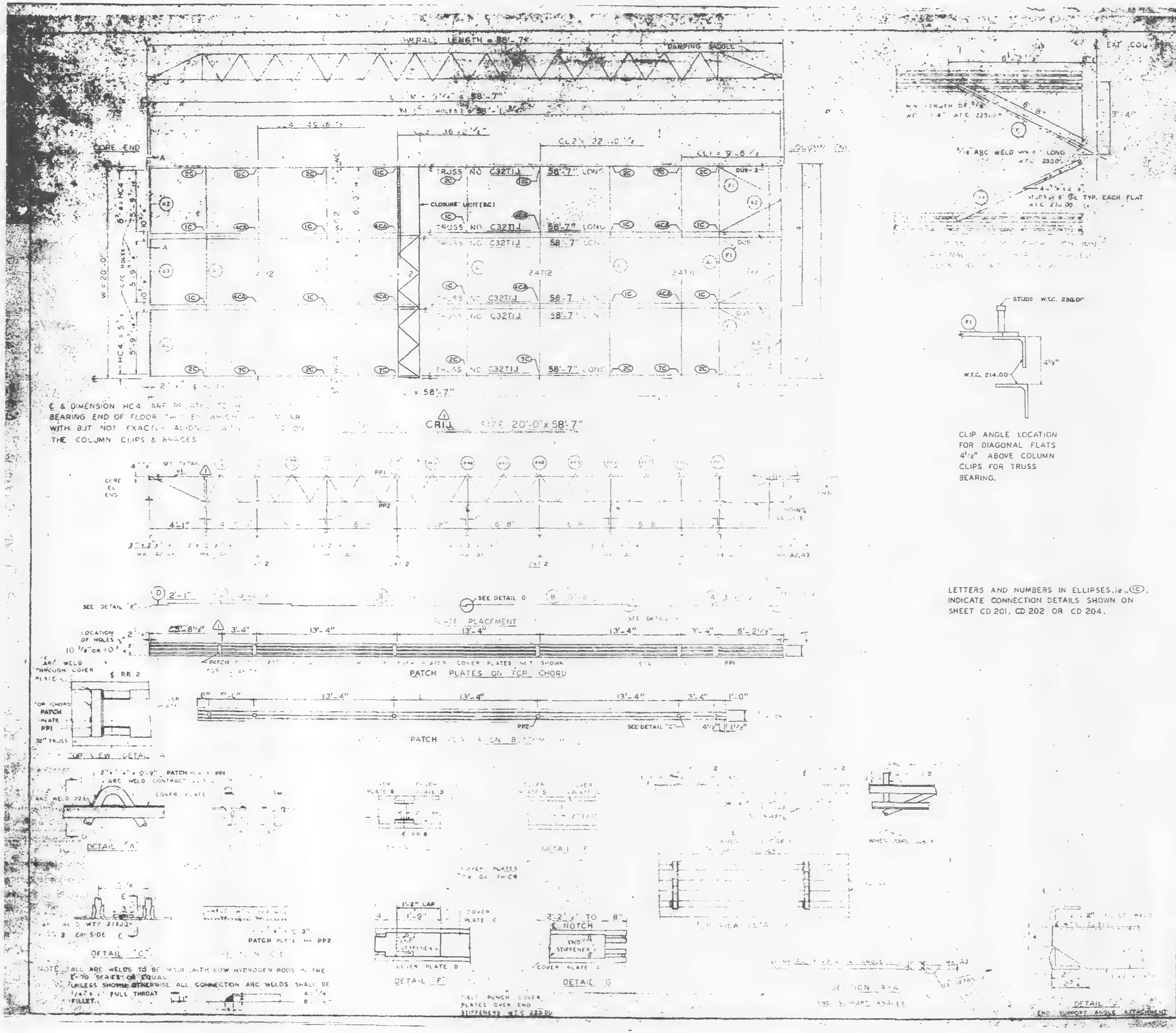
CHECKED BY T.M. CHURA
DATE OCT. 23, 1968

IN CHARGE OF PROD. DEV.

DETAILED BY A.S. WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. EP CRIH



℄ & DIMENSION HC4 ARE RELATED TO ... BEARING END OF FLOOR ... WITH BUT NOT EXACTLY ALIGNED WITH ... THE COLUMN CLIPS & BRACES

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	[illegible]	SIZE	REF. DWG.
FLOOR TRUSSES	TIJ	6	C32TIJ - 58'-7"	[illegible]
BRIDGING TRUSSES	TI1	1	24TI1 - 19'-11"	BT212
	TI2	3	24T12 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4"x 19'-11"	ST 403
	A2	4	3"x2"x1/4"x 8'-11 [illegible]	ST 402
	A3	2	3"x2"x [illegible]	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 3/8"x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4"x 0'-9"	ST 4[illegible]
	PP2	18	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	A	3	9"x 0.135"x 13'-11 1/2"	ST303
	B	6	9"x .0135"x 15'-2"	ST303
	C	3	[illegible] .0135"x 13'-2 1/2"	ST303
	D	3	9"x .0135"x 2'-1"	ST303
ANGLE CLIPS	C1	21	2"x 1 1/2"x 1/4"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	[illegible]	2	4"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
	[illegible]	1	[illegible] 3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1"ø x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 ∠ 1 1/2"x 1 1/4"x 230 x 6'-6 1/2"	BT212 CD 204
CONNECTION PLATES	P1	5	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	4	4 1/2"x .39"x 0'-9"	ST 400
	P3	1	4 1/2"x .30"x 1'-0"	ST 400

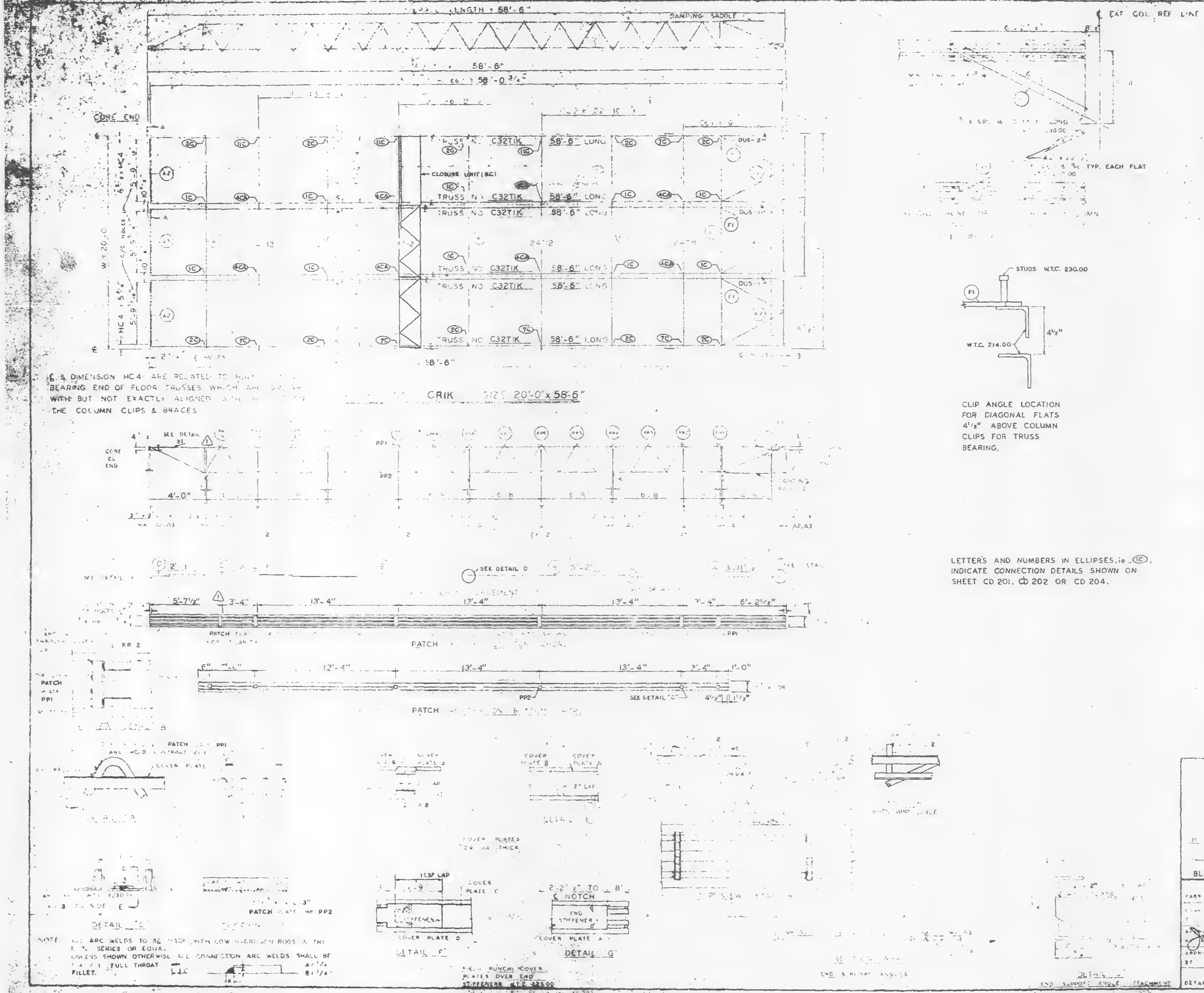
NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	G.D.C.

[illegible]	10-15-69
[illegible] AB4 [illegible] 239	7-22-68
[illegible] AB4 41	7-22-68
[illegible]	1-6-69
[illegible]	1-3-68
[illegible]	7-22-68
[illegible] 47	7-22-68
[illegible] AB4 42	10-15-69

FLOOR PANEL DETAILS
WORLD TRADE CENTER - N.Y.C.
THE PORT OF NEW YORK AUTHORITY

BLDG. [illegible] FLOORS 40 (N)
PANEL CRIJ [illegible] x 58'-7"
BLDG. B FLOORS 40 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-8 [illegible] PLATE
APPROVED FOR FABRICATION BY James White FOR PONYA DATE 1/2/70
DRAWN BY [illegible] DATE OCT 23, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
CHECKED BY T.M. CHURN [illegible] DATE OCT 23, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.
FABRICATION CONTRACT W.T.C. [illegible]



Ⓒ & DIMENSION HC4 ARE RELATED TO [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE [illegible] WITH BUT NOT EXACTLY ALIGNED [illegible] THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS [illegible] E 70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET.
A = 1/8
B = 1/4"

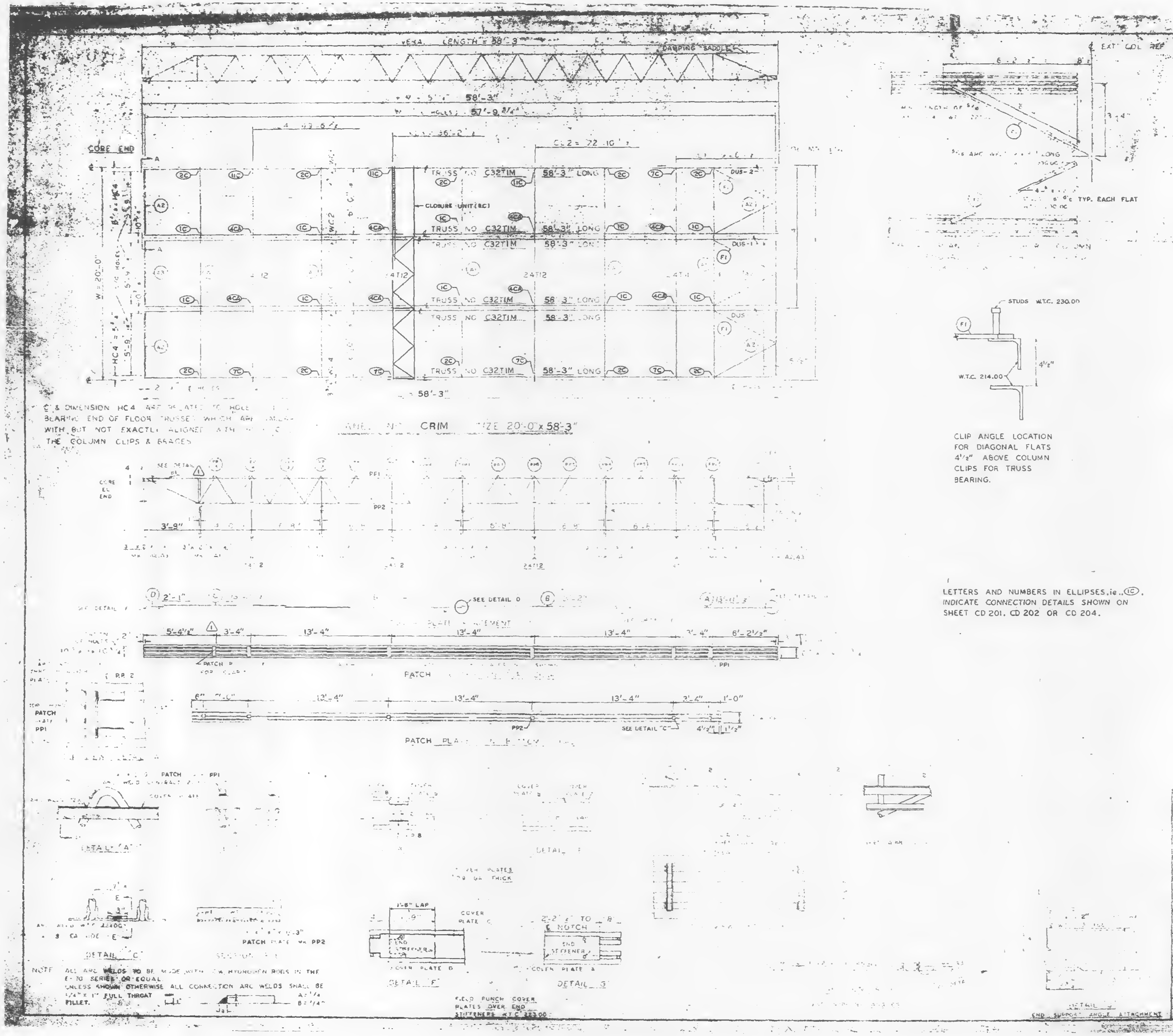
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIK	6	C32TIK - 58'-6"	ST 201K
BRIDGING TRUSSES	[illegible]	1	24T[illegible] - 19'-11"	BT 2[illegible]
	T12	3	24T12 - 19'-11"	BT 212
3 x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 408
	A2	4	3" x 2" x 1/4" x 5'-11 9/16"	ST 408
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 408
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	[illegible] x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	[illegible] x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS 2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" [illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1 1/2" x 1 1/4" x .230 x 6'-6 1/2"	BT 212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/8"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	G.D.C.

[illegible] 10-15-68
[illegible] 7-22-68
[illegible] 7-22-68
[illegible] 1-6-69
[illegible] AB3 7 1-3-69
[illegible] 7-22-68
[illegible] 7-22-68
7 AB4 42 10-15-68

FLOOR PANEL DETAILS
[illegible] CENTER N.Y.C.
FOR
[illegible] NEW YORK AUTHORITY
[illegible] 45-46 (S) 46 (N)
PANEL CRIK [illegible] x 58'-6"
BLDG. B FLOORS 45 (EAST) 46 (EAST & WEST)

FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 AB3-8
APPROVED FOR FABRICATION James White [illegible] N.Y.A. DATE 1/2/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DRAWN BY [illegible] DATE OCT. 23, 1968
CHECKED BY T.M.CHURA DATE OCT. 23, 1968
IN CHARGE OF PROD. [illegible]
LACLEDE STEEL CO.
DETAILED BY [illegible]
FABRICATION CONT. NO. W.T.C. [illegible] 221
SHEET NO. [illegible] CRIK



℄ & DIMENSION HC4 ARE RELATED TO HOLE ... BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH ... THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie., ⓘⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

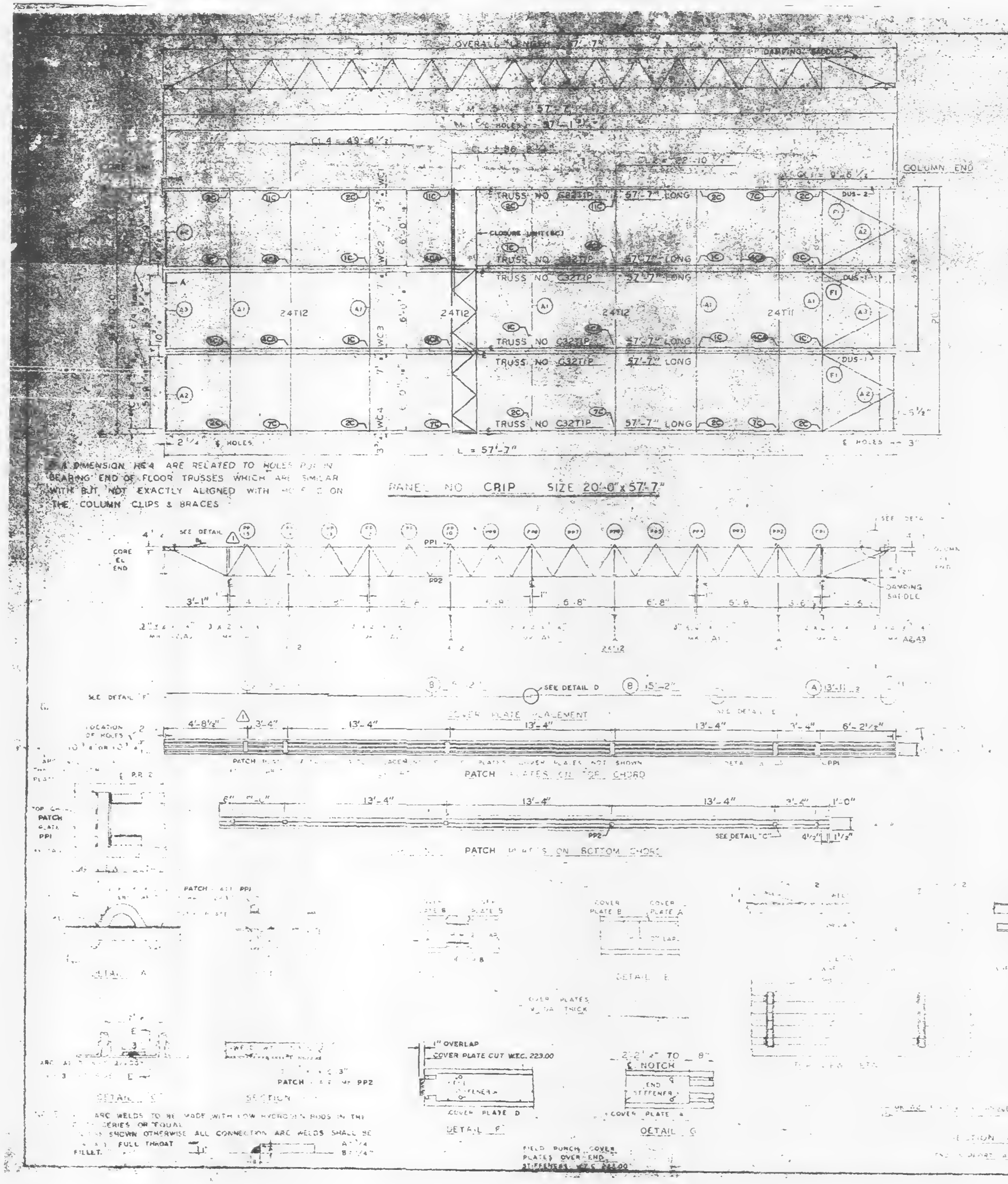
REQUIRED MATERIAL PER PANEL				REF. DRWGS
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIM	6	C32TIM - 58'-3"	ST201M
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT213
	T12	3	24T12 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	5	3"x2"x1/4"x19'-11"	ST 403
	A2	4	3"x2"x1/4"x5'-11 9/16"	ST 403
	A3	2	3"x2"x1/4"x5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 5/8"x 6'-8"	ST 400
PATCH PLATES	PP1	16	2"x 1/4"x 0'-9"	ST 400
	PP2	18	3"x 1/8"x 0'-3"	ST 400
COVER PLATES	A	3	9"x 0.35"x 13'-11 1/2"	ST303
	B	6	9"x 0.35"x 15'-2"	ST303
	C	3	9"x 0.135"x 13'-2 1/2"	ST303
	D	3	9"x 0.135"x 2'-1"	ST303
ANGLE CLIPS	C1	21	2"x 1 1/2"x 1/4"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
	DUS 2	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ⌀ x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-#1 1/2"x 1 1/4"x .230 x 5'-6 1/2"	BT212 CD-04
CONNECTION PLATES	P1	5	3 1/2"x 3/8"x 0'-6 1/2"	ST 400
	P2	4	4 1/2"x .39"x 0'-9"	ST 400
	P3	1	4 1/2"x .39"x 1'-0"	ST 400

NO.	DATE	REVISION
1	6-9-69	AS NOTED

10-15-68
7-22-68
7-22-68
1-6-69
1-3-69
7-22-68
7-22-68
384-42 10-15-68

72-73 (N)
PANEL CRIM SIZE 20'-0" x 58'-3"
BLDG. B FLOORS 72-73 (WEST) ⚠1

FABRICATED BY LACLEDE STEEL COMPANY
DESIGN DRAWING NO. 7 483-B PLATE
APPROVED FOR FABRICATION BY James White DATE 1/2/70
DRAWN BY DATE OCT 23, 1968
APPROVED FOR FABRICATION DATE
CHECKED BY T.M. CHURA DATE OCT 23, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. CRIM

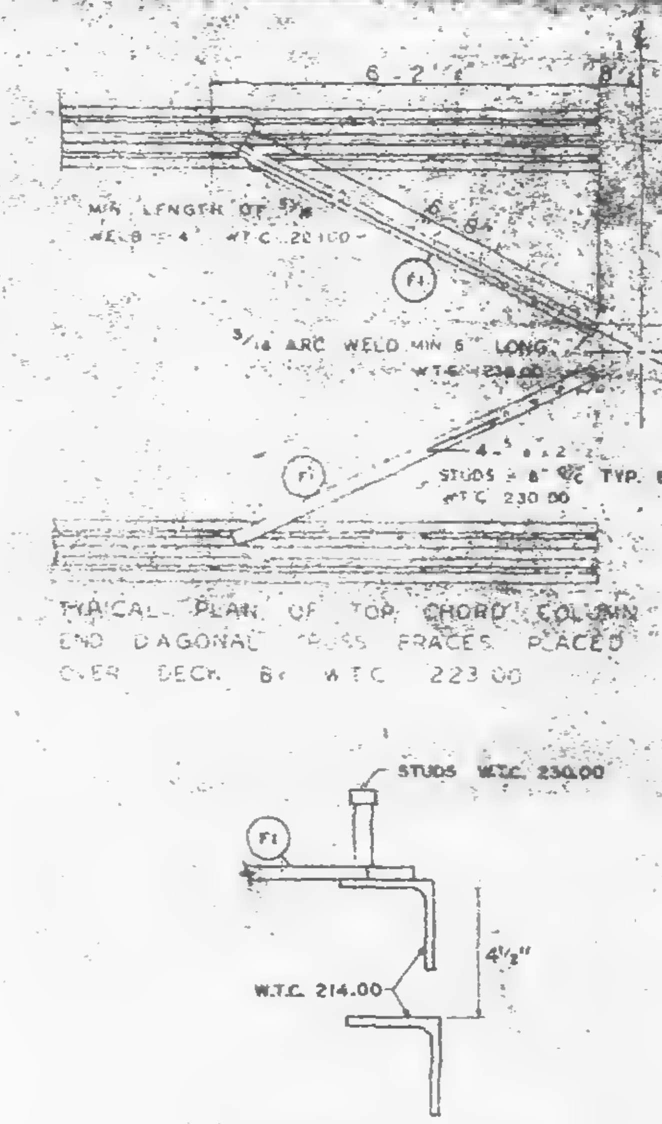


Ⓐ DIMENSION HE4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH ON THE COLUMN CLIPS & BRACES

PANEL NO CRIP SIZE 20'-0" x 57'-7"

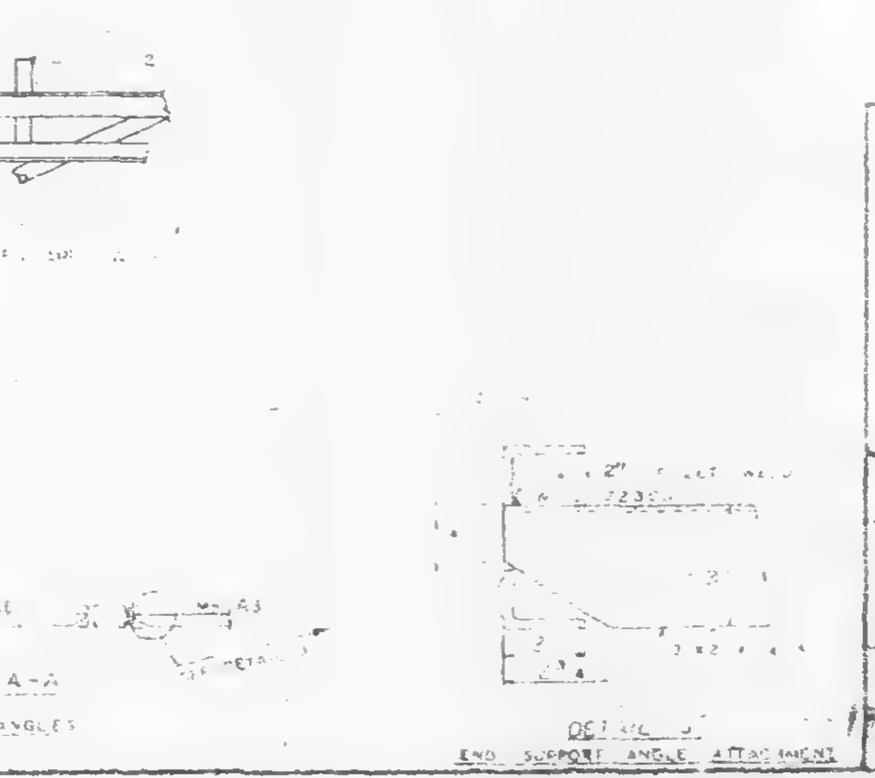
ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE SERIES OR EQUAL
SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00


EXT. COL.
6'-2½"
MIN LENGTH OF 5/16 WELD 4" W.T.C. 201.00
6'-8"
F1
5/16 ARC WELD MIN 6" LONG W.T.C. 230.00
STUDS 8" TYP. EACH FLAT W.T.C. 230.00
STUDS W.T.C. 230.00
W.T.C. 214.00
4½"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1P	[illegible]	C32T1P x 57'-7"	[illegible]
BRIDGING TRUSSES	T11	1	24T11 x 19'-1"	[illegible]
	T12	3	24T12	[illegible]
ANGLE	A1	[illegible]	[illegible]	[illegible]
	A2	4	[illegible]	[illegible]
	A3	2	[illegible]	[illegible]
DIAGONAL FLATS	F1	6	1½" x [illegible]	[illegible]
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	[illegible]
	PP2	18	3" x ⅜" x 0'-3"	51.400
COVER PLATES	A	[illegible]	[illegible]	[illegible]
	B	6	9" x .035" x [illegible]	[illegible]
	C	3	9" x .035" x [illegible]	[illegible]
ANGLE CLIPS	C1	21	[illegible]	[illegible]
SHEAR ANCHOR	SA2	9	[illegible]	[illegible]
DAMPING SADDLE	DUS-1	2	[illegible]	[illegible]
	DUS-2	1	3½" x 3½" x [illegible]	[illegible]
CONNECTION BAR	CB1	4	1" x 1'-9"	51.400
CLOSURE UNIT	BC	3	2 ↳ 1½ x [illegible] x .230 x 6'-6½"	CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6"	51.400
	P2	4	4½" x .30" x 0'-9"	51.400
	P3	1	4½" x .30" x 1'-0"	51.400

LETTERS AND NUMBERS IN ELLIPSES, i.e., ⑫ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	

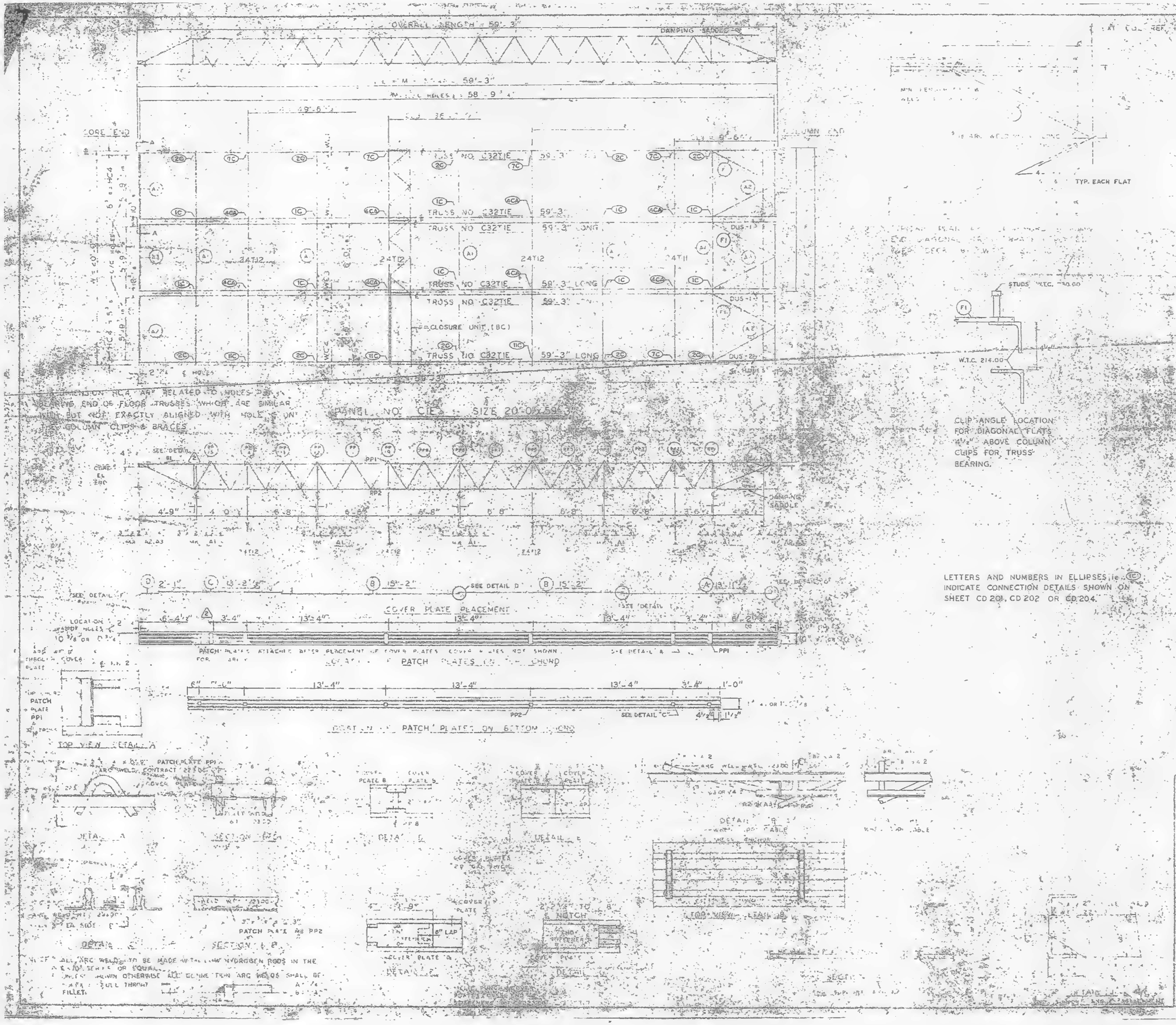
10-15-68
7-22-68
7-22-69
1-8-69
AB3
AB
7-22-69
7-22-69
10-15-68

74 (N)

CRIP 20'-0" x 57'-7"

BLDG. B FLOORS 74 (WEST) 1

FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO AB3-B
PLATE
APPROVED FOR FABRICATION BY James White FOR PONYA
DATE 1/2/70
DRAWN BY
DATE OCT 23 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE
CHECKED BY T.M. CHURA
DATE OCT 23 1968
IN CHARGE OF PROD. REV.
DETAILED BY A.C. [illegible]
FABRICATION CONT NO. W.T.C. 221
SHEET NO. FP-CRIP



DIMENSION HC4 ARE RELATED TO HOLES ON BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE [illegible] SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	[illegible]	[illegible]	C32TIE - 59'-3	[illegible]
[illegible] TRUSSES	T11	1	24[illegible]	[illegible]
	T12	3	24T [illegible] 9'-[illegible]	ST 212
[illegible] ANGLE	A1	5	3 x 2½ x ¼ x [illegible]	ST 403
	A2	4	3 x 2 x ¼ x 5 [illegible]	ST 403
	A3	2	3 x 2 x ¼ x [illegible]	ST 403
DIAGONAL FLATS	[illegible]	[illegible]	[illegible]	ST 402
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible] x 0'-3"	ST 400
COVER PLATES	A	3	[illegible]	ST 303
	B	6	9 x 0135 x 15'-2	ST 303
	C	3	9 x 0135 x 13'-2	ST 303
	D	3	9 x .035 x 3'-1"	ST 303
ANGLE CLIPS	C1	21	2 x 1½ x ¼ x 0'-6	ST 400
#3 SHEAR ANCHOR	SA2	9	#3 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½ x 3½ x ⅜ x 3'-6⅞	ST 296
	DUS-2	1	3½ x 3½ x ⅜ x [illegible] 5⅞	ST 296
CONNECTION BAR	CB1	4	1[illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1¼ x 1¼ x [illegible]	ST 212
			230 x 6'-6½"	[illegible]
CONNECTION PLATES	P1	5	3½ x ⅜ x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½ x .39" x 1'-0"	ST 400

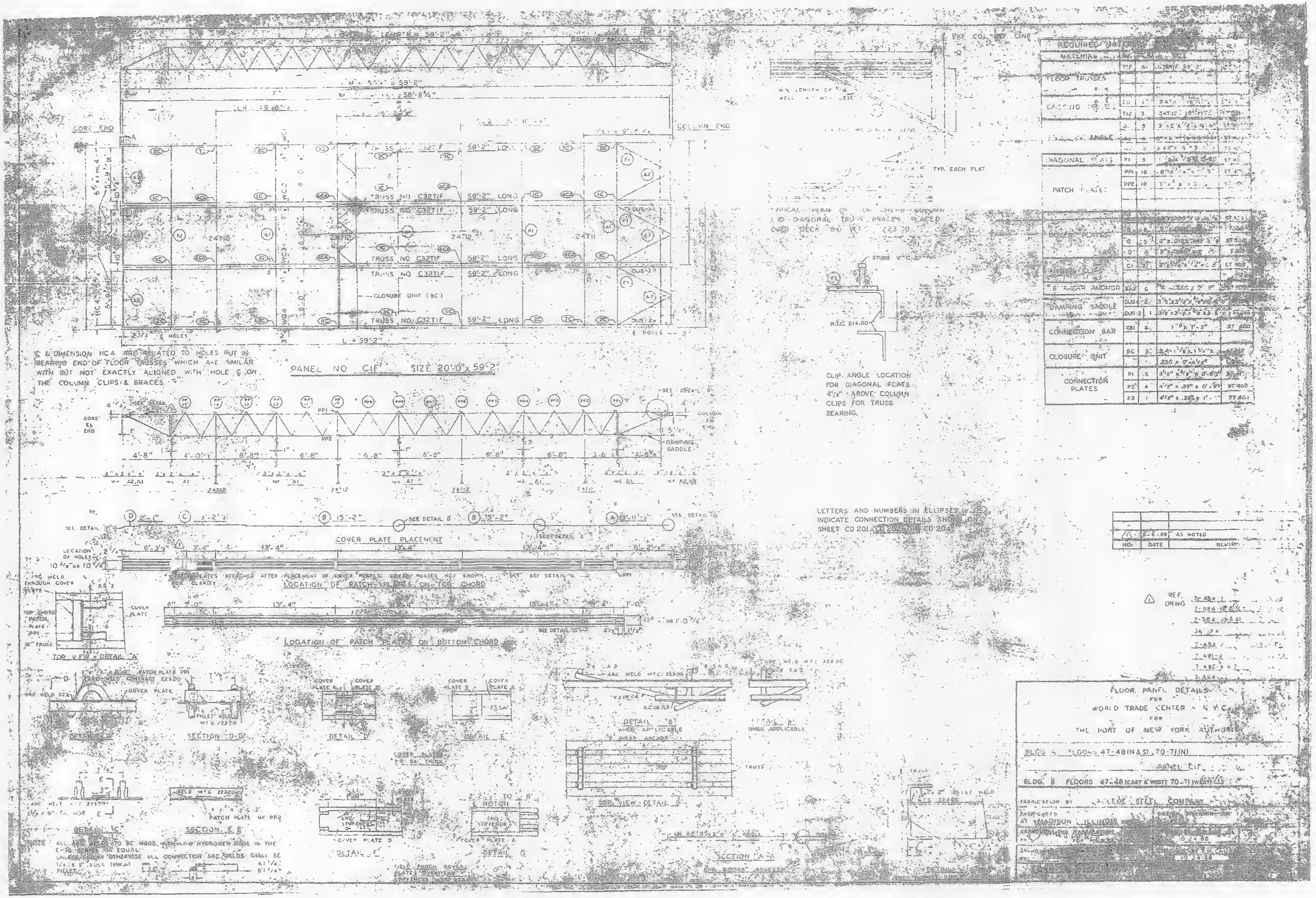
NO.	DATE	REVISION	BY
2	6-6-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.C.

2
[illegible] AB3 [illegible] 0-15-68
AB3 [illegible] 7-22-68
AB4 41 7-22-68
[illegible] 1-6-69
AB3 2 [illegible]
[illegible] 2 7-22-68
AB2 6 6 7-22-68
AB4 42 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A [illegible] 10-11 (NORTH & SOUTH)
PANEL TYPE [illegible] 59'-3

FABRICATION BY LACLEDE STEEL COMPANY
[illegible] ST. [illegible] ILLINOIS
DESIGN DRAWING NO. AB3-7
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
DRAWN BY [illegible] DATE APRIL 10, 1968
CHECKED BY J.R. PAUL DATE APRIL 10, 1968
IN CHARGE OF PROD. DEV.
FABRICATION CONT. NO. W.C.C. [illegible]221
SHEET NO. CD CIE[illegible]



C & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF ... END DIAGONAL TRUSS BRACES PLACED OVER DECK ... W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES (IC) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIALS				REF.
MATERIAL	MARK	NO.	SIZE	
FLOOR TRUSSES	T1F	6	C32T1F 59'-2"	[illegible]
BRACING TRUSSES	T11	1	24T11 [illegible]	[illegible]
	T12	3	24T12 [illegible]	[illegible]
ANGLE	A	9	3"x2"x1/4"x [illegible]	ST [illegible]
	[illegible]	[illegible]	[illegible]	ST [illegible]
	[illegible]	2	3"x2"x1/4"x [illegible]	ST [illegible]
DIAGONAL FLATS	V1	5	[illegible]	ST 40[illegible]
PATCH PLATES	PP1	18	8"x1/4"x [illegible] 9"	ST 4[illegible]
	PP2	18	3"x5/8"x 0'-[illegible]	ST [illegible]
COVER PLATES	[illegible]	[illegible]	[illegible]	ST 50[illegible]
	B	6	[illegible]	[illegible]
	C	3	3"x.0185"x 13'-2 1/2"	ST 50[illegible]
	D	3	3"x.0185"x 2'-1"	[illegible]
ANGLE CLIPS	C1	2	2"x1 1/2"x1/4"x0'-3"	ST 400
3/4" SHEAR ANCHOR	SA2	6	[illegible]	[illegible]
DAMPING SADDLE	DUS-1	2	3 1/2"x2 1/2"x3/8"x[illegible]	[illegible]
	DUS-2	1	3 1/2"x3 1/2"x3/8"x3'-6"	[illegible]
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-1 1/2"x1 1/2"x [illegible]	[illegible]
			230 x 5'-6 1/2"	[illegible]
CONNECTION PLATES	P1	5	3 1/2"x3/8"x0'-8 1/2"	ST [illegible]
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-[illegible]	ST 401

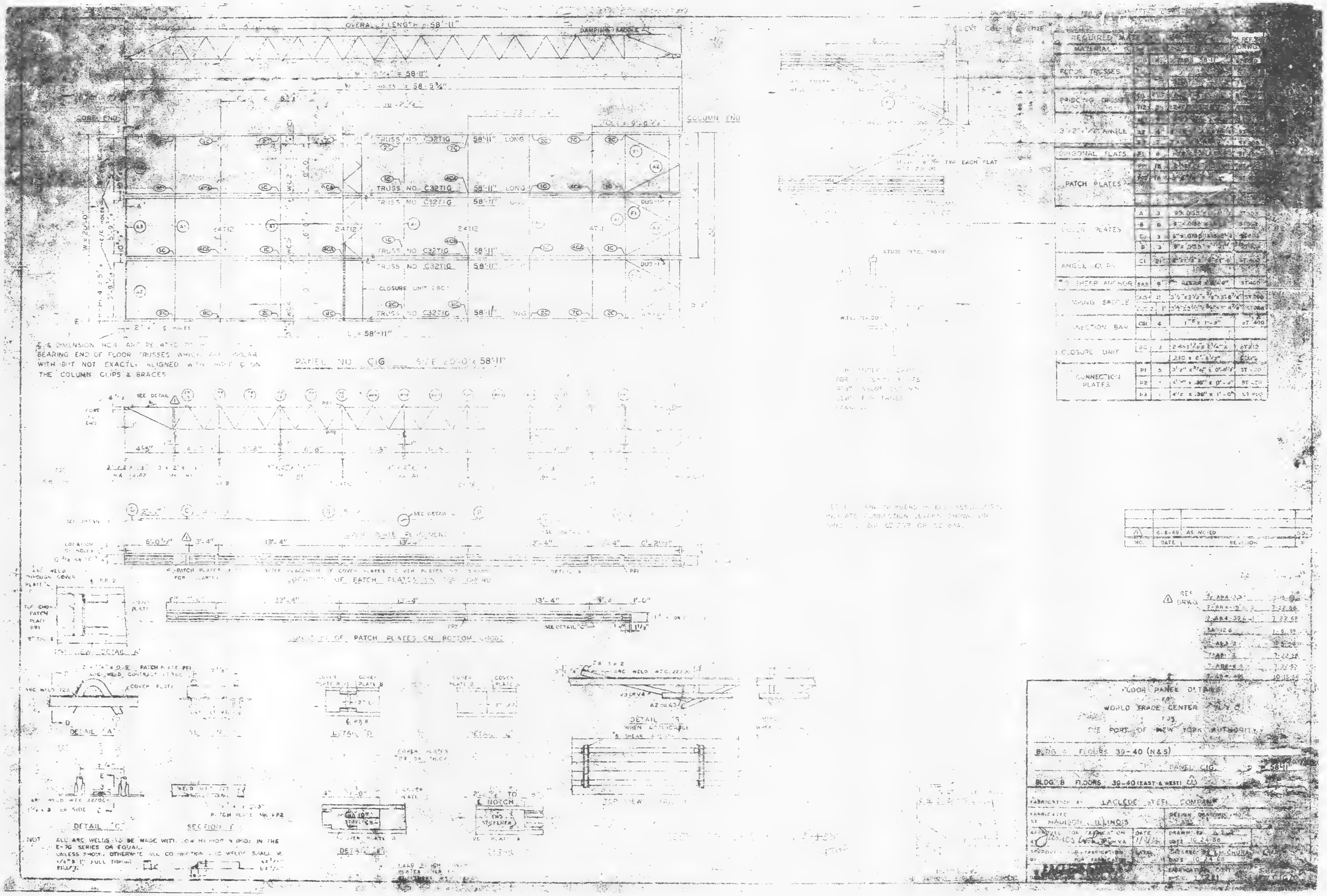
NO.	DATE	REVISION
1	6-6-69	AS NOTED

REF. DRWG
7-AB0-1
7-AB4-1
7-AB4-3 & 4
5A-24
7-AB3-2
7-AB1-2
7-AB5-3 & 7
7-AS4

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48 (N & S), 70-71 (N)
PANEL C1F
BLDG. B FLOORS 47-48 (EAST & WEST) 70-71 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION
10-24-68
BY Y.M. CHUR
10-24-68



℄ & DIMENSION "HC-4" ARE RELATED TO [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. C1G SIZE 20'-0" x 58'-11"

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLETS.

REQUIRED MA[illegible] MATERIAL				REF. DRWG.
FLOOR TRUSSES	[illegible]G	[illegible]	[illegible] 58'-11"	[illegible]G
BRIDGING TRUSSES	T1	[illegible]	[illegible]	[illegible]
	T12	[illegible]	24[illegible]	[illegible]
3"x2"x1/4" ANGLE	A1	[illegible]	[illegible]	[illegible]
	A2	4	[illegible]	ST [illegible]
	A3	[illegible]	[illegible]	ST 403
DIAGONAL FLATS	F1	4	[illegible]	ST [illegible]
PATCH PLATES	PP1	18	[illegible]	[illegible]
	PP2	18	[illegible]	[illegible]
COVER PLATES	A	3	9"x.0135"x[illegible]	ST 403
	B	6	9"x.083"x[illegible]	ST 403
	C	3	6"x.0785"x[illegible]	ST 403
	D	3	9"x.023"x[illegible]	[illegible]
ANGLE CLIPS	C1	21	[illegible]	ST 400
[illegible] SHEAR ANCHOR	SA[illegible]	9	[illegible] REBAR [illegible] 4'-0"	ST 400
DAMPING SADDLE	DS[illegible]	2	3 1/2"x3 1/2"x 5/8"x3'-6 7/8"	ST 400
	DS 2	1	[illegible] 7/8"	ST 400
CONNECTION BAR	CB1	4	1"⌀ x 1'-9"	ST 400
CLOSURE UNIT	8C	2	2-4x1 1/2x[illegible]	8T212
			230 x 6'-6 1/2"	[illegible]
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	[illegible]	4 1/4" x .36" x 0'-8"	ST 400
	P3	1	4 1/2 x .36" x 1'-0"	ST 400

NO.	DATE	REVISION	
⚠1	6-6-69	AS NOTED	[illegible]

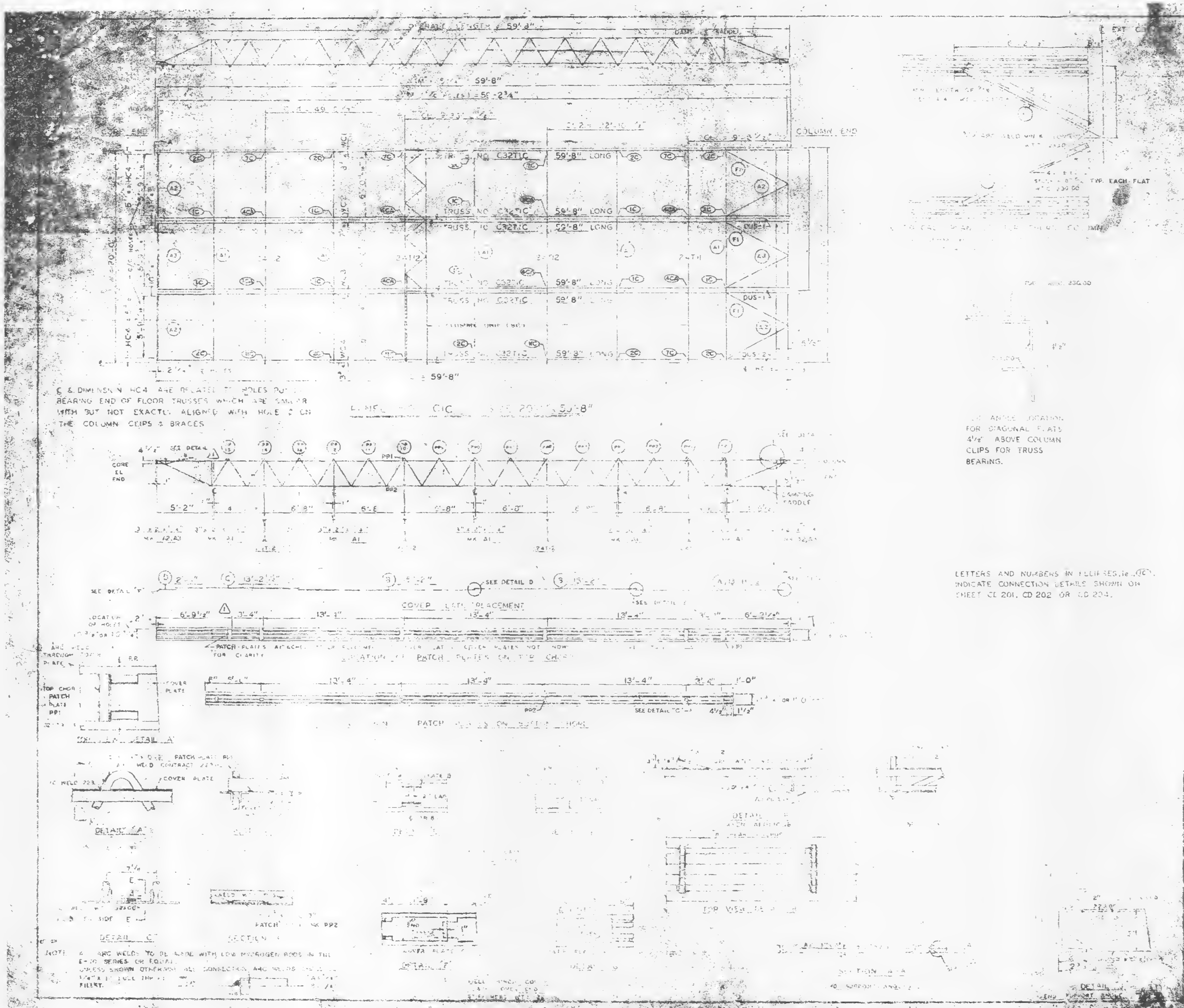
⚠1 REF. DRWG.

7-AB4-13[illegible]	10-15-68
7-AB4-15[illegible]	7-22-68
7-AB4-39[illegible]-1	7-22-68
SA-12 6	1-6-69
[illegible] AB-3-2	[illegible]
7-AB1-2	7-22-68
7-AB6-4-8	7-22-68
7-AD4-4[illegible]	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N&S)
PANEL C1G [illegible] 58'-11"
BLDG. B FLOORS 39-40 (EAST & WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. [illegible]
APPROVED FOR FABRICATION BY [illegible] DATE 11/3/68
DRAWN BY [illegible] DATE 10-24-68
APPROVED [illegible] FOR FABRICATION BY [illegible] DATE [illegible]
CHECKED BY E.M. CHUBA DATE 10-24-68



℄ & DIMENSION HC4 ARE RELATED TO HOLES [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE 2 ON THE COLUMN CLIPS & BRACES

[illegible] ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: [illegible] ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FILLET.

MATERIAL	MK	NO.	SIZE	REF DRWG
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
3"x3"x¼" ANGLE	A2	[illegible]	[illegible]	[illegible]
DIAGONAL FLATS	[illegible]	[illegible]	[illegible]	[illegible]
PATCH PLATES	PP1	[illegible]	[illegible]	[illegible]
	PP2	18	[illegible] x 0'-3"	[illegible]
COVER PLATES	A	3	9"x.0135"x2'-[illegible]	[illegible]
	B	8	9"x.0135"x[illegible]	[illegible]
	C	3	9"x.0135"x[illegible]	[illegible]
	D	3	9"x.0135"x2'-1"	[illegible]
ANGLE CLIPS	C1	21	2"x1⅞"x¼"x0'-6"	[illegible]
⅞ SHEAR ANCHOR	SA2	12	⅞ SHEAR [illegible]	[illegible]
DAMPING SADDLE	DUS 1	2	3½"x3½"x[illegible]	[illegible]
	DUS 2	1	3½"x3½"x[illegible]	[illegible]
CONNECTION BAR	CB1	4	1 [illegible] x 1'-3"	[illegible]
CLOSURE UNIT	BC	3	2-∠1½x1¼ [illegible]	[illegible]
			230 x 0'-8⅛"	[illegible]
CONNECTION PLATES	P1	5	3½"x⅜"x0'-6"	[illegible]
	P2	4	4½"x.30"x0'-9"	[illegible]
	P3	1	4½"x.30"x1'-[illegible]	[illegible]

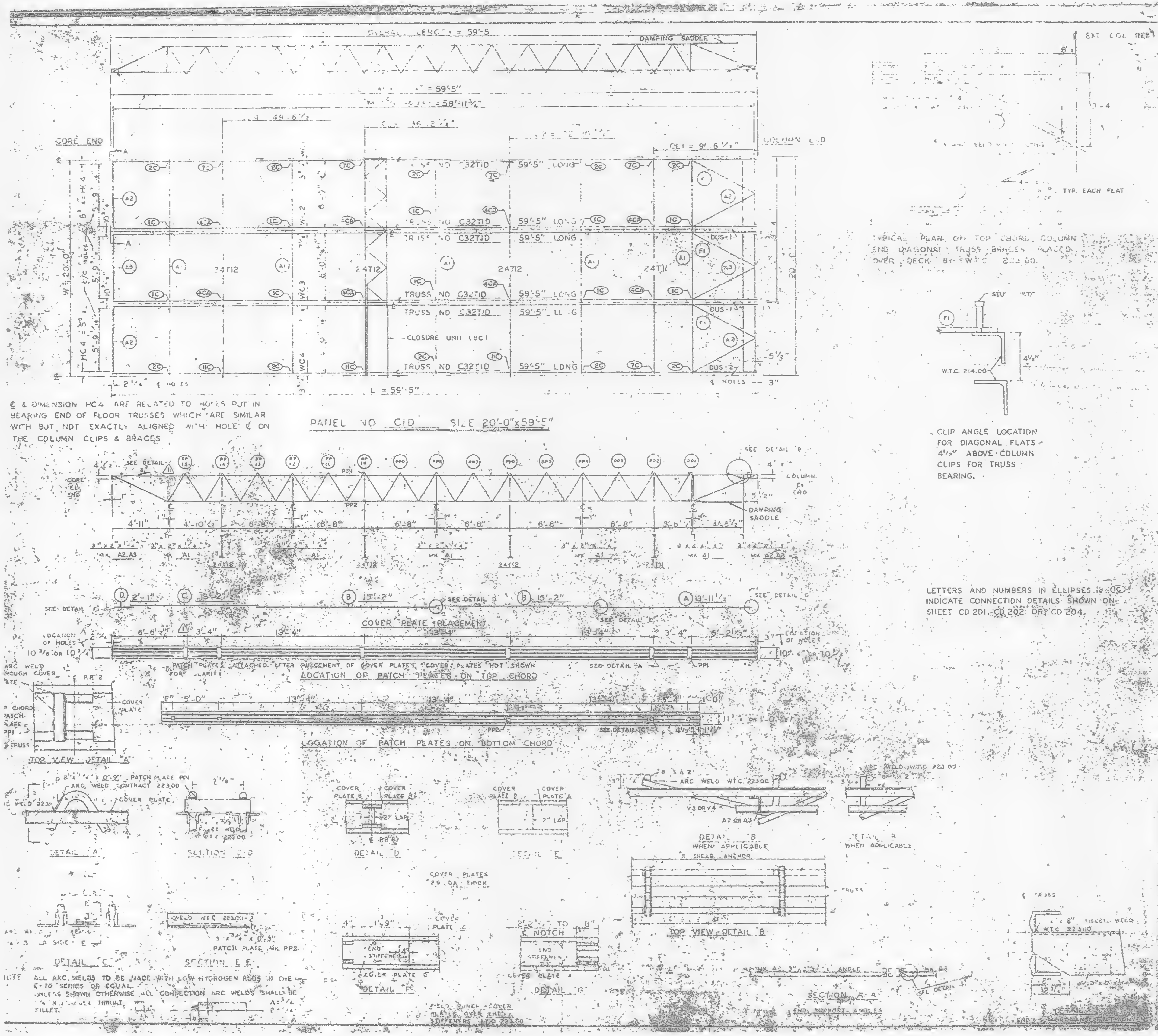
NO.	DATE	REVISION
⚠1	6-8-69	AS NOTED

REF DRWG

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 4[illegible]-58,60-66,66-74,79-91,93-106(S)
PANEL C1C [illegible] 59'-8"
BLDG B FLOORS 49-59,60-74,79-91,93-106 (EAST) (1)

FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED [illegible] MADISON, ILLINOIS
DATE 10-24-68
10-24-68



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD, COLUMN END, DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x [illegible] FULL THROAT FILLET.

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1D	8	C32T1D 59'-5"	ET201D
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT211
	T12	3	24T12 - 19'-11"	BT212
3"x2"x¼" ANGLE	A1	18	3"x2"x¼"x 19'-3"	ST 403
	A2	4	3"x2"x¼"x 5'-11⅝"	ST 403
	A3	2	3"x2"x¼"x 5'-[illegible]¾"	ST 403
DIAGONAL FLATS	F1	5	1⅛"x [illegible]"x 6'-9"	ST 402
PATCH PLATES	PP1	18	2"x ¼"x 0'-2"	ST 400
	PP2	48	3"x ⅜"x 0'-3"	ST 400
COVER PLATES	A	3	9"x.0135"x 13'-11½"	ST303
	B	6	9"x.0135"x 15'-2"	ST303
	C	3	9"x.0135"x 13'-2½"	ST303
	D	3	9"x.0135"x 2'-1"	ST303
ANGLE CLIPS	C1	21	2"x1½"x¼"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅜"x3'-8⅞"	ST 298
	DUS-2	1	3½"x3½"x⅜"x3'-8⅞"	ST 298
CONNECTION BAR	CB1	4	1"[illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-[illegible] 1½"x 1¼" x	BT212
			.230 x 6'-6½"	CD204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

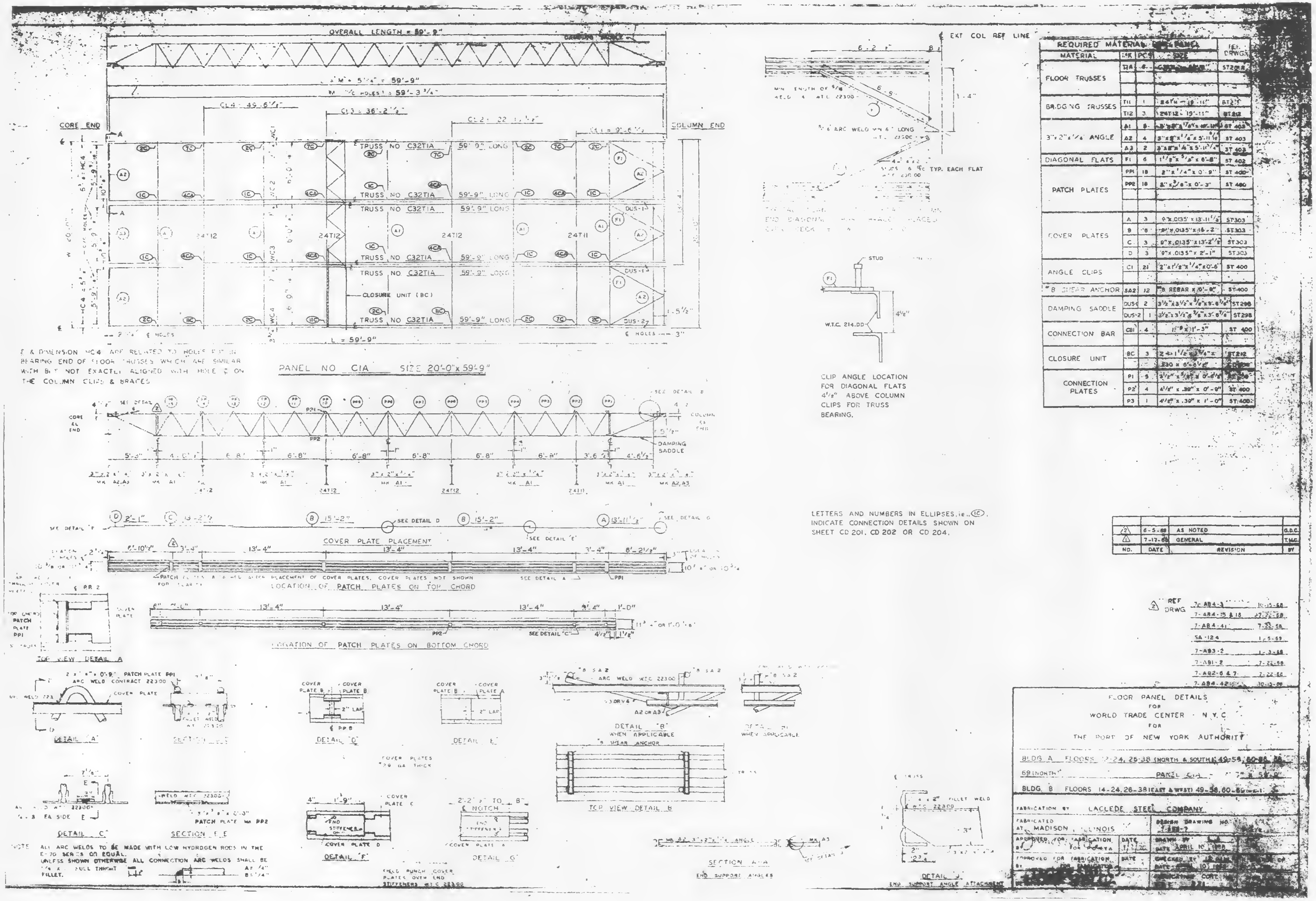
NO.	DATE	REVISION	BY
1	6-6-69	AS NOTED	GDC

REF. DRWG
7-AB4-3,3.1 10-15-68
7-AB4-15 & 16 7-22-68
⚠ 7-AB4-39 & 41 7-22-68
SA-1247 1-6-69
7-AB3-2 1-3-68
7-AB1-2 7-22-68
7-AB2-6 & 9 7-22-68
7-AB4-42 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 81-82 (N)
PANEL C1D [illegible] x 59'-5"
BLDG. B FLOORS 81-82 (WEST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-7
APPROVED FOR FABRICATION [illegible] DATE [illegible]
DRAWN BY [illegible] DATE 10-24-68
APPROVED FOR FABRICATION BY DATE
CHECKED BY T.M. CHURA DATE 10-24-68
IN CHARGE OF [illegible]
D



€ & DIMENSION HC4 ARE RELATED TO HOLES FOR IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES

PANEL NO C1A SIZE 20'-0" x 59'-9"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL [illegible] PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG.
FLOOR TRUSSES	T1A	4	[illegible]	ST202
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT211
	T12	3	24T12 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4"x [illegible]	ST 403
	A2	4	3"x2"x1/4"x 5'-11 1/2"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 0'-9"	ST 400
	PP2	18	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	A	3	9"x.0135"x 13'-11 1/2"	ST303
	B	6	9"x.0135"x 15'-2"	ST303
	C	3	9"x.0135"x 13'-2 1/2"	ST303
	D	3	9"x.0135"x 2'-1"	ST303
ANGLE CLIPS	C1	21	2"x 1 1/2"x 1/4"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST-400
DAMPING SADDLE	DUS-1	2	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 1/2"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 ∠ 1 1/2 x 1 1/2 x 3/4" x	ST212
			230 x 6'-6 1/2"	[illegible]
CONNECTION PLATES	P1	5	2 1/2" x 3/8" x 0'-6 1/2"	[illegible]
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-5-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.C.

2 REF DRWG

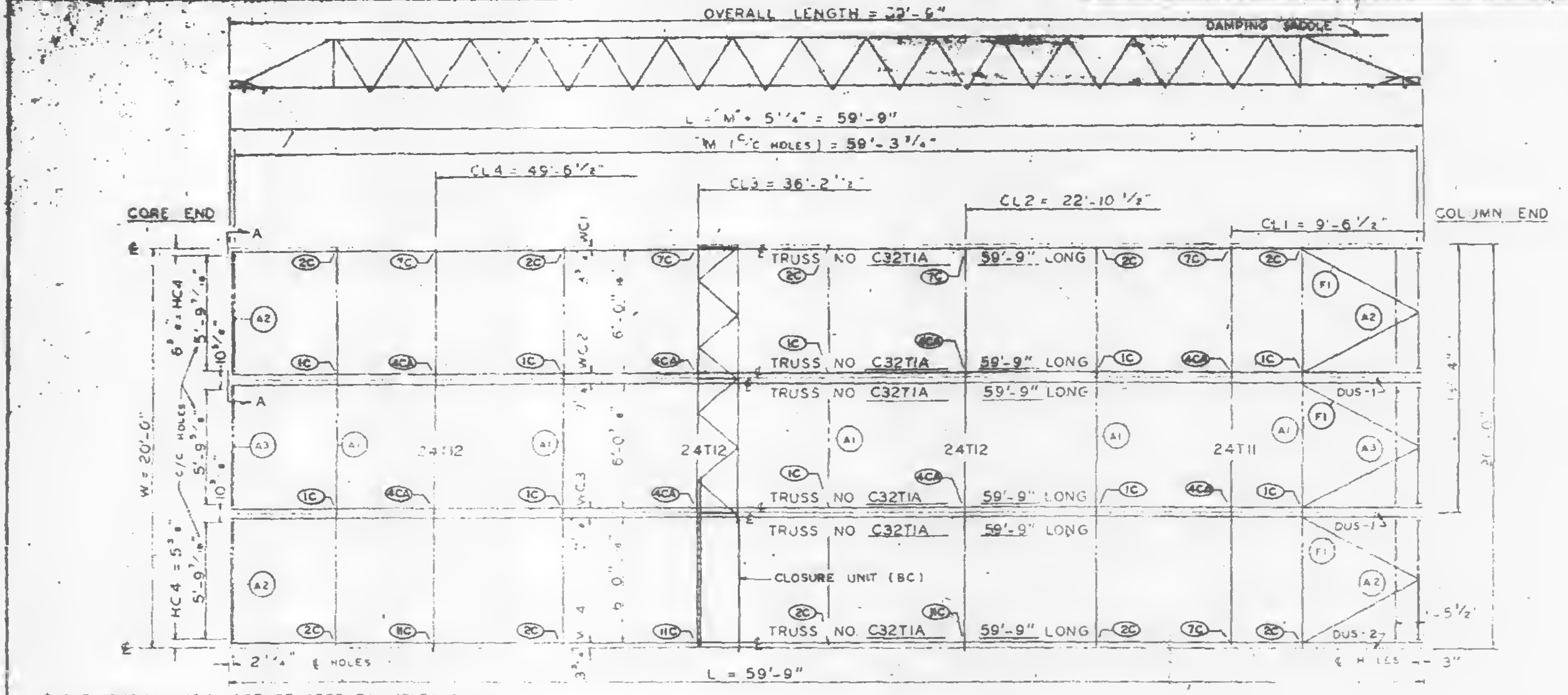
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA-124	1-5-69
7-AB3-2	1-3-68
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4 x [illegible] FULL THROAT FILLET.
A = 1/4"
B = 1/4"

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

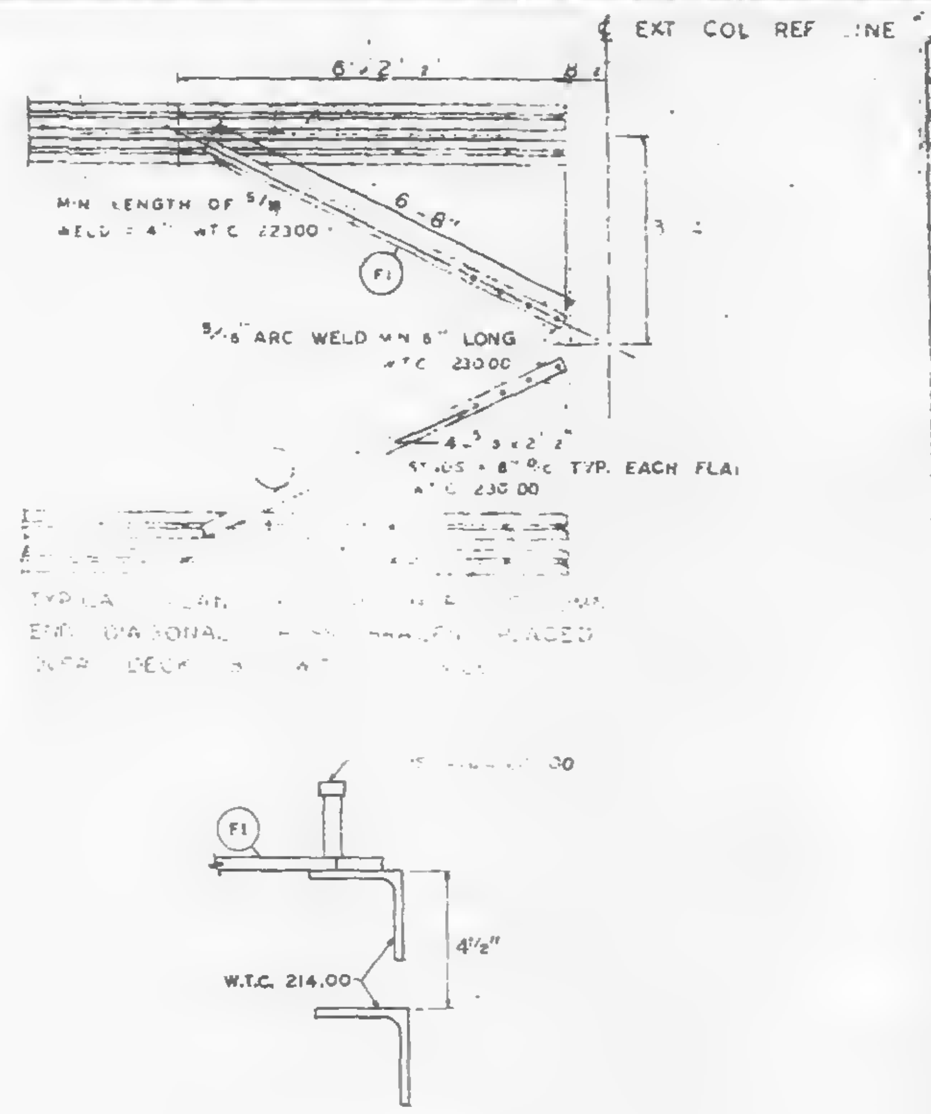
BLDG A FLOORS 12-24, 25-38 (NORTH & SOUTH) 49-58, 60-66, 68-69 (NORTH)
PANEL C1A - 20'-0" x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-[illegible]-7
APPROVED FOR FABRICATION BY [illegible] FOR [illegible] DATE [illegible]
DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY [illegible] DATE
CHECKED BY [illegible] DATE [illegible] 10, 1968
CONTRACT [illegible]

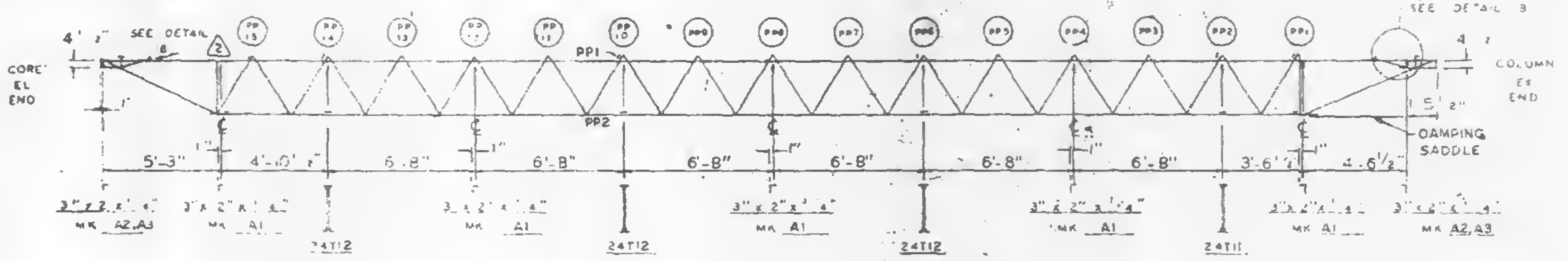


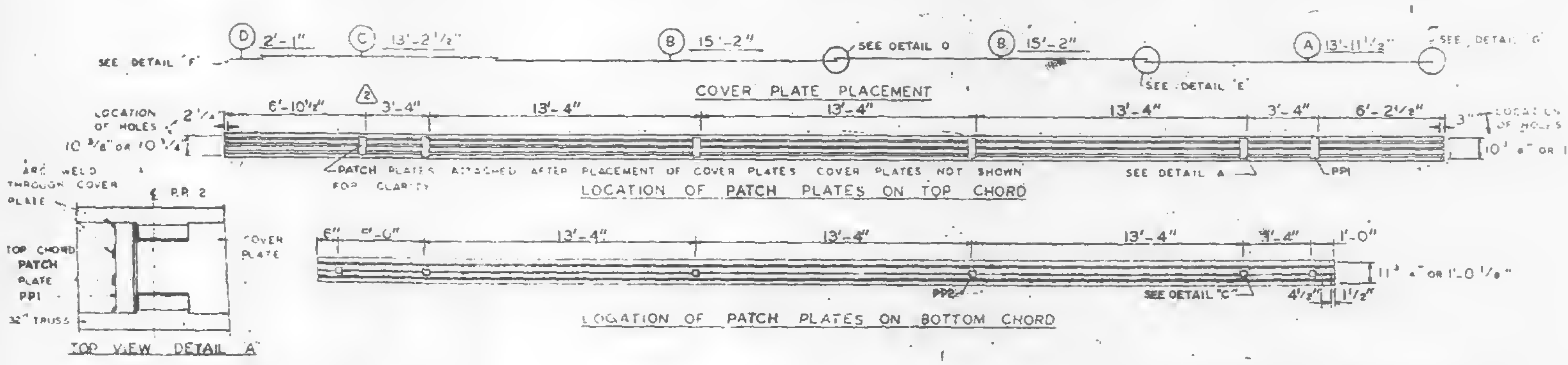
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO C1A SIZE 20'-0" x 59'-9"


℄ EXT COL REF LINE
MIN LENGTH OF 5/16 WELD = 4" W.T.C. 22300
5/16 ARC WELD MIN 8" LONG W.T.C. 23000
5/16 x 8" O.C. TYP. EACH FLAT
W.T.C. 214.00
4 1/2"
F1

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.





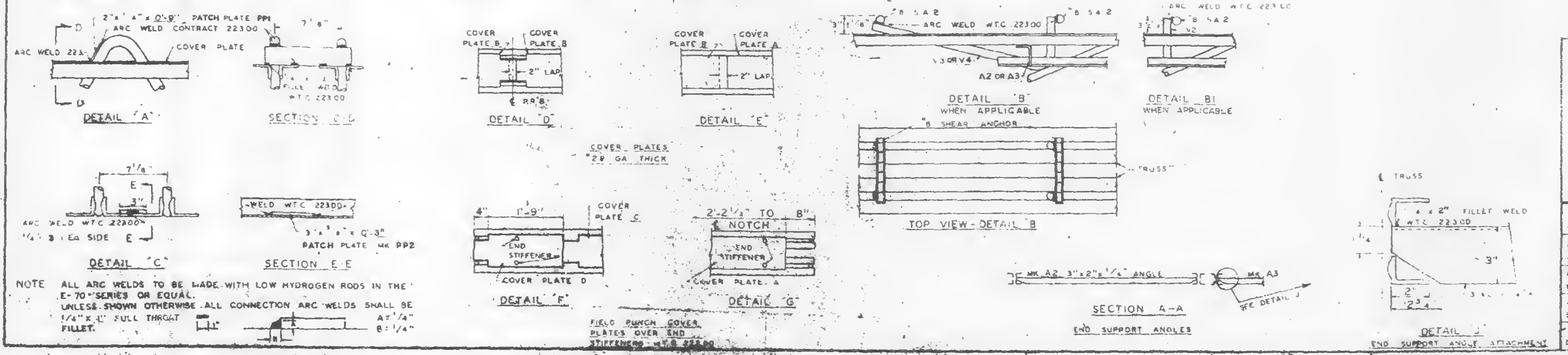
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	6	C32T1A - 59'-9"	ST 201A
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT 211
	T12	3	24T12 - 19'-11"	BT 212
3"x2"x1/4" ANGLE	A1	5	3"x2"x1/4"x 10'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11 9/16"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	5	1 1/2" x 1/4 x 5'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4 x 0'-9"	ST 400
	PP2	18	3" x 3/8 x 0'-3"	ST 400
COVER PLATES	A	3	9 x .0155 x 3'-11 1/2	ST 303
	B	6	9 x 0.0155 x 15'-2	ST 303
	C	3	9 x .0155 x 3'-2 1/2	ST 303
	D	3	9 x 0.0155 x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1 1/2 x 1/4 x 0'-6"	ST 400
3/8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2"x5"x 3/8"x3'-6 7/8"	ST 298
	DUS2	1	3 1/2 x 5 x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1 1/4 x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 1/2 x 1 1/2" x 1 1/4" x	BT 212
			.230 x 6'-6 1/2"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-5-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.C.

2 REF DRWG

7-AB4-3	6-15-68
7-AB4-15 & 16	7-24-68
7-AB4-41	7-22-68
SA 124	1-5-59
7-AB3-7	1-3-68
7-AB1-2	7-22-68
7-AB2-5 & 7	7-22-68
7-AB4-42	10-15-68



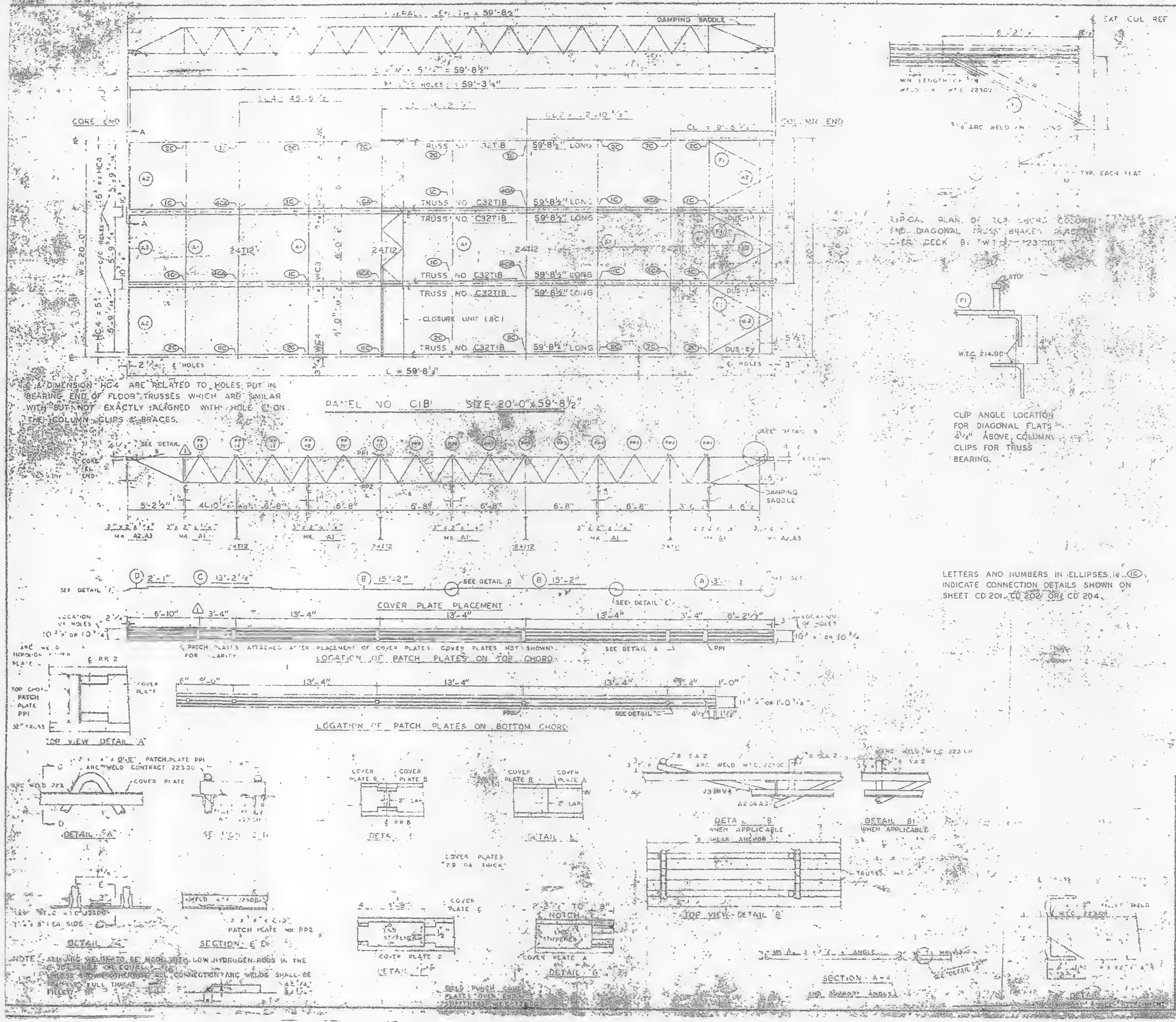
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 2" FULL THROAT FILLET.
A = 1/4"
B = 1/4"

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 14-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68, 69 (NORTH) PANEL C1A 20'-0" x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 PLATE	
APPROVED FOR FABRICATION BY James White FOR PONYA	DATE 1/2/70	DRAWN BY DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE APRIL 10, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP C1A


DAMPING SADDLE
CORE END
COLUMN END
TRUSS NO. C32T1B 59'-8½" LONG
CLOSURE UNIT (8C)
L = 59'-8½"
W = 20'-0"
PANEL NO. C1B SIZE 20'-0"x59'-8½"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION E-E
PATCH PLATE MK PP2
DETAIL "B"
DETAIL B1 WHEN APPLICABLE
TOP VIEW DETAIL "B"
SECTION A-A
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACE. COVER DECK BY W.T.C. 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	[illegible]
FLOOR TRUSSES	T1B	6	C32T1B 59'-8½"	[illegible]
[illegible] TRUSSES	T12	3	24T [illegible]	[illegible]
[illegible] ANGLE	A1	5	3"x2"x¼"x [illegible]	ST [illegible]
	[illegible]	4	[illegible]	ST [illegible]
		[illegible]	[illegible]	ST [illegible]
[illegible]		[illegible]	[illegible]	ST 402
PATCH [illegible]	PP1	18	[illegible]	ST 400
	PP2	18	[illegible]	ST 400
COVER PLATES	A	3	9"x.0135" x 13'-11½"	ST 303
	B	6	9"x.0135"x 15'-2"	ST 303
	C	3	9"x.0135"x 15'-2½"	ST 303
	D	3	[illegible] .133" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1½"x¼"x0-6	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅜"x3-8⅞"	ST 200
	DUS-2	1	3½"x3½"x⅜"x3-8⅞"	ST 298
CONNECTION BAR	CB1	4	1 ⅝ x 1'-3"	ST 400
CLOSURE UNIT	8C	3	2-+1½"x1¼"x	ST 212
			.230 x 6'-6½"	CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-8½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

⚠1	6-5-69	AS NOTED	GDI
NO.	DATE	REVISION	BY

⚠1 REF. DWGS.

7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
AB4-39 & 41	7-22-68
SA-124	1-6-69
7-AB3-2	[illegible]
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

[illegible] PANEL DETAILS

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83-91, 93-106 (N)

PANEL C1B [illegible] x 59'-8½"

BLDG. B FLOORS 83-91, 93-106 (WEST) ⚠1

FABRICATED BY [illegible] STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-2 PLATE [illegible]

Jameslwhite

APPROVED FOR FABRICATION FOR PORT OF N.Y. AUTH. DATE 1/2/70

DRAWN BY [illegible] DATE 0-24-68

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE

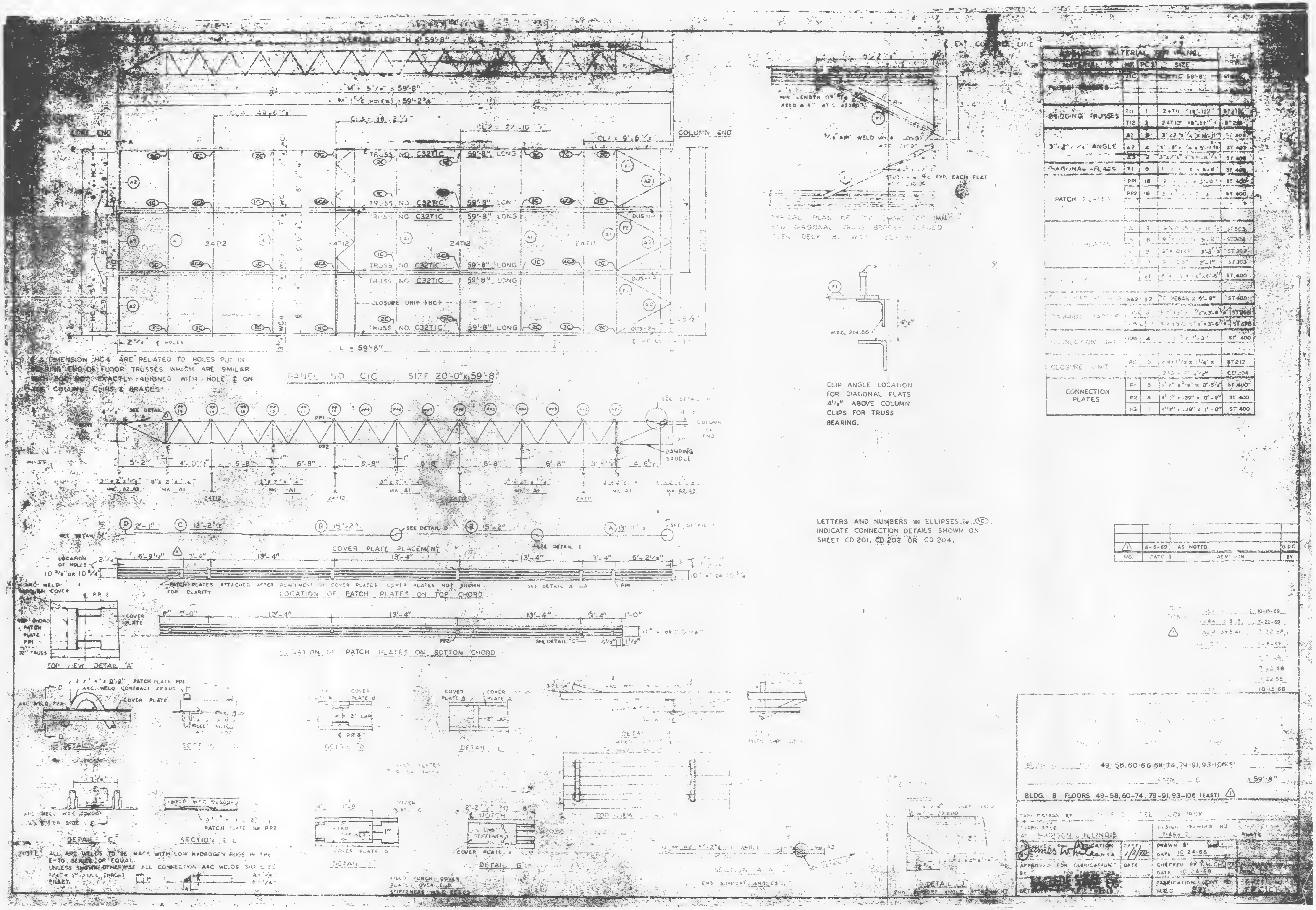
CHECKED BY T.M. CHURA DATE 10-24-68

IN CHARGE OF PROD. DEPT. [illegible]

FABRICATION CONT. NO. [illegible]

DETAILED BY [illegible]

CD [illegible]18



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO C1C SIZE 20'-0" x 59'-8"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 3/16" x 1" FULL THROAT FILLET.

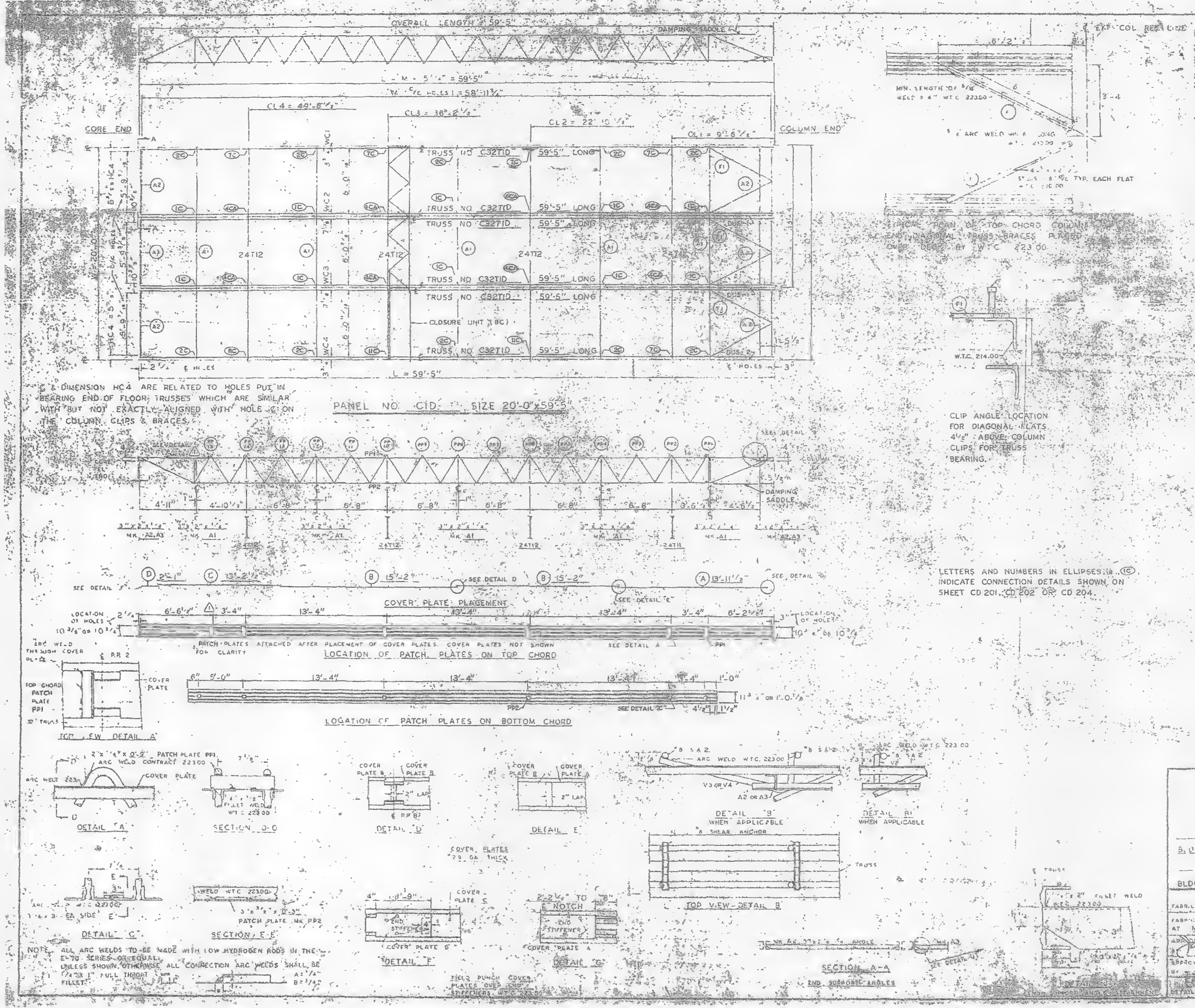
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	SHOP DRWG.
FLOOR TRUSSES	T1C		C32T1C 59'-8"	ST [illegible] C
BRIDGING TRUSSES	T11	1	24T11 15'-11"	ST 212
	T12	3	24T12 18'-11"	ST 210
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4"x 18'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 1/4"	ST 400
DIAGONAL FLATS	F1	6	[illegible] x 6'-8"	ST 400
PATCH PLATES	PP1	18	[illegible] x 3'-0"	ST 400
	PP2	18	[illegible]	ST 400
COVER PLATES	A	3	[illegible] x 13'-11 1/2"	ST 303
	B	6	[illegible] x 15'-2"	ST 304
	C	3	2" x 0.135" x 13'-2 1/2"	ST 303
	D	3	[illegible] x 2'-1"	ST 303
		C1	2" x 2" x 1/4" x 0'-6"	ST 400
	SA2	12	[illegible] REBAR x 0'-9"	ST 400
DAMPING SADDLES	DS	2	[illegible] x 3'-6 7/8"	ST 298
	DS	1	3 1/2 x 3 1/2 x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1 [illegible] x 1'-3"	ST 400
CLOSURE UNIT	8C	3	24 x 11 1/2 x 1 1/4" x	ST 212
			210 x 4'-6 1/2"	CD 204
CONNECTION PLATES	P1	5	5 1/2" x 3/8" x 0'-5 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
△1	6-6-69	AS NOTED	G.D.C.

[illegible] 10-15-69
[illegible] 38 & 39 7-22-69
△1 ALT 39 & 41 7-22-68
[illegible] 1-6-69
[illegible]
7-22-68
7-22-68
10-15-68

BLDG. [illegible] 49-58, 60-66, 68-74, 79-91, 93-106 (S)
PANEL C1C x 59'-8"
BLDG. 8 FLOORS 49-58, 60-74, 79-91, 93-106 (EAST) △1

FABRICATION BY [illegible] COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James W. White [illegible] N.Y.A. DATE 1/2/70
APPROVED FOR FABRICATION BY [illegible] DATE
DESIGN DRAWING NO [illegible] 7
DRAWN BY [illegible] DATE 10-24-68
CHECKED BY T.M. CHURCH DATE 10-24-68
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. [illegible] C1C


OVERALL LENGTH = 59'-5"
DAMPING SADDLE
CORE END
COLUMN END
CL4 = 49'-8 1/2"
CL3 = 38'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
TRUSS NO C32T1D 59'-5" LONG
24T12
CLOSURE UNIT (BC)
L = 59'-5"
PANEL NO. C1D SIZE 20'-0" x 59'-5"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
DETAIL "B" WHEN APPLICABLE
DETAIL "B1" WHEN APPLICABLE
TOP VIEW - DETAIL "B"
DETAIL "C"
SECTION E-E
DETAIL "F"
DETAIL "G"
SECTION A-A
END SUPPORT ANGLES
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 22300
PATCH PLATE MK PP2
W.T.C. 214.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
EXT. COL. REF. LINE

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. ⒾⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DWG.
FLOOR TRUSSES	T1D	6	C32T1D 59'-5"	ST201D
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT211
	T12	3	24T12 - 19'-11"	BT212
3" x 2" x 1/4 ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	[illegible]	ST 403
	A3	2	[illegible]	ST 403
DIAGONAL FLATS	F1	[illegible]	[illegible] 6-9	ST 402
PATCH PLATES	PP1	18	2" [illegible] 2'-9"	ST 400
	PP2	48	[illegible] 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.135" x 13'-[illegible] 1/2	ST303
	B'	6	9" x 0.135" x 15'-2"	ST303
	C	3	9" x 0.13[illegible]" x 13'-2 1/2"	ST303
	D	3	9" x 0.135" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 [illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1 1/2" x 1 1/4" x	BT212
			.230 x 8'-6 1/2"	CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

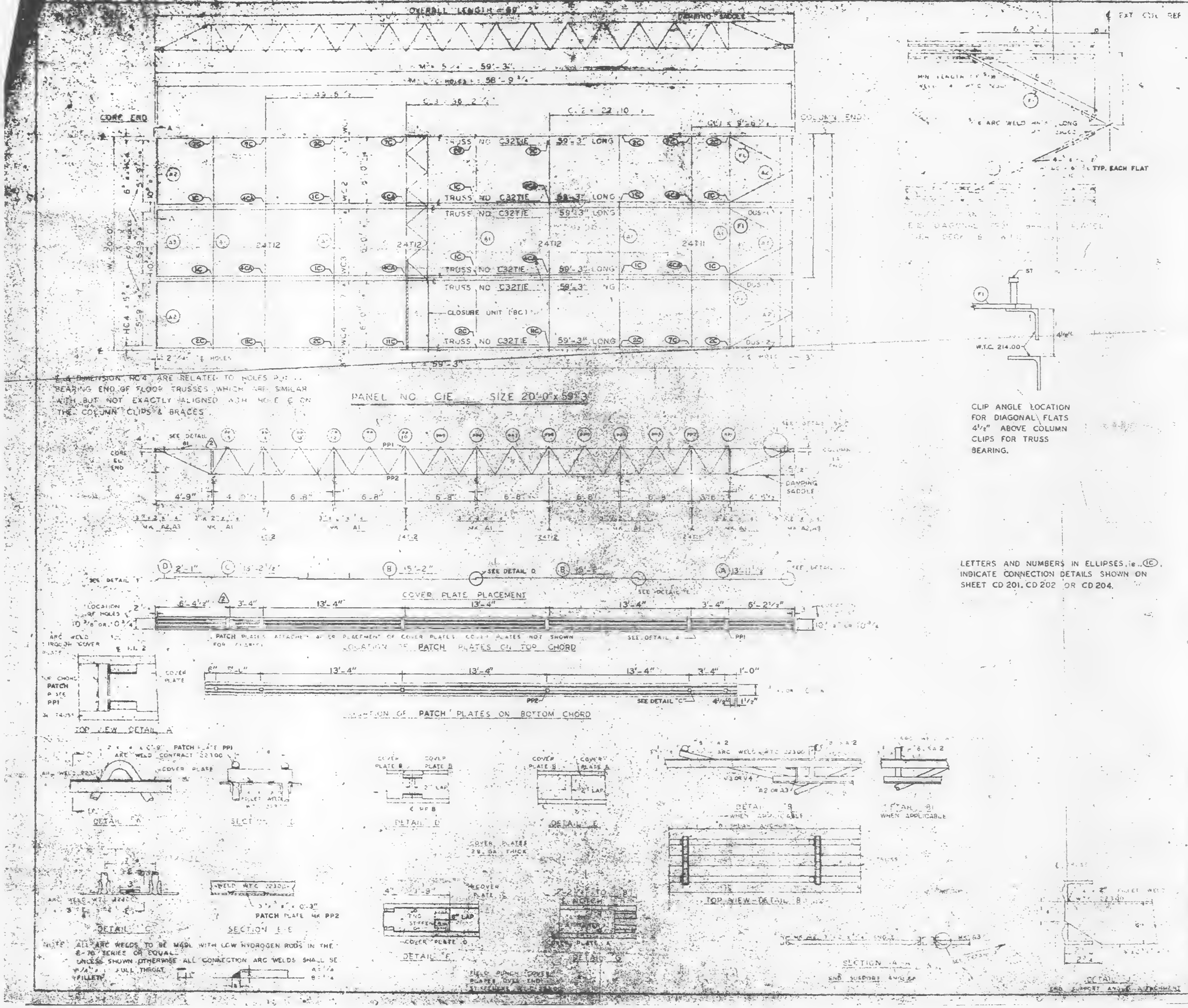
NO.	DATE	REVISION	BY
1	6-6-69	AS NOTED	GDI

REF DRW.G.
- 7-AB4-3,3.1 10-15-68
- 7-AB4-15 & 6 7-22-68
- ⚠ 7-AB4 39 & 41 7-22-68
- SA 24 1-6-69
- 7-AB3-2 1-3-68
- 7-AB4-2 7-22-68
- 7-AB2-5 & 7 7-22-68
- 7-AB4-42 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 81-82 (N)
PANEL C1D 20' x 59'-5"
BLDG. B FLOORS 81-82 (WEST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB5 7 PLATE
APPROVED FOR FABRICATION BY James White DATE 1/2/70
DRAWN BY DATE 10-24-68
APPROVED FOR FABRICATION BY DATE
CHECKED BY T.M. CHURA DATE 10-24-68
IN CHARGE OF PROD. DEV.
DETAILED BY C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET C1D



℄ & DIMENSION HC4 ARE RELATED TO HOLES AT BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘ1C, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE
1/4" FULL THROAT FILLET.

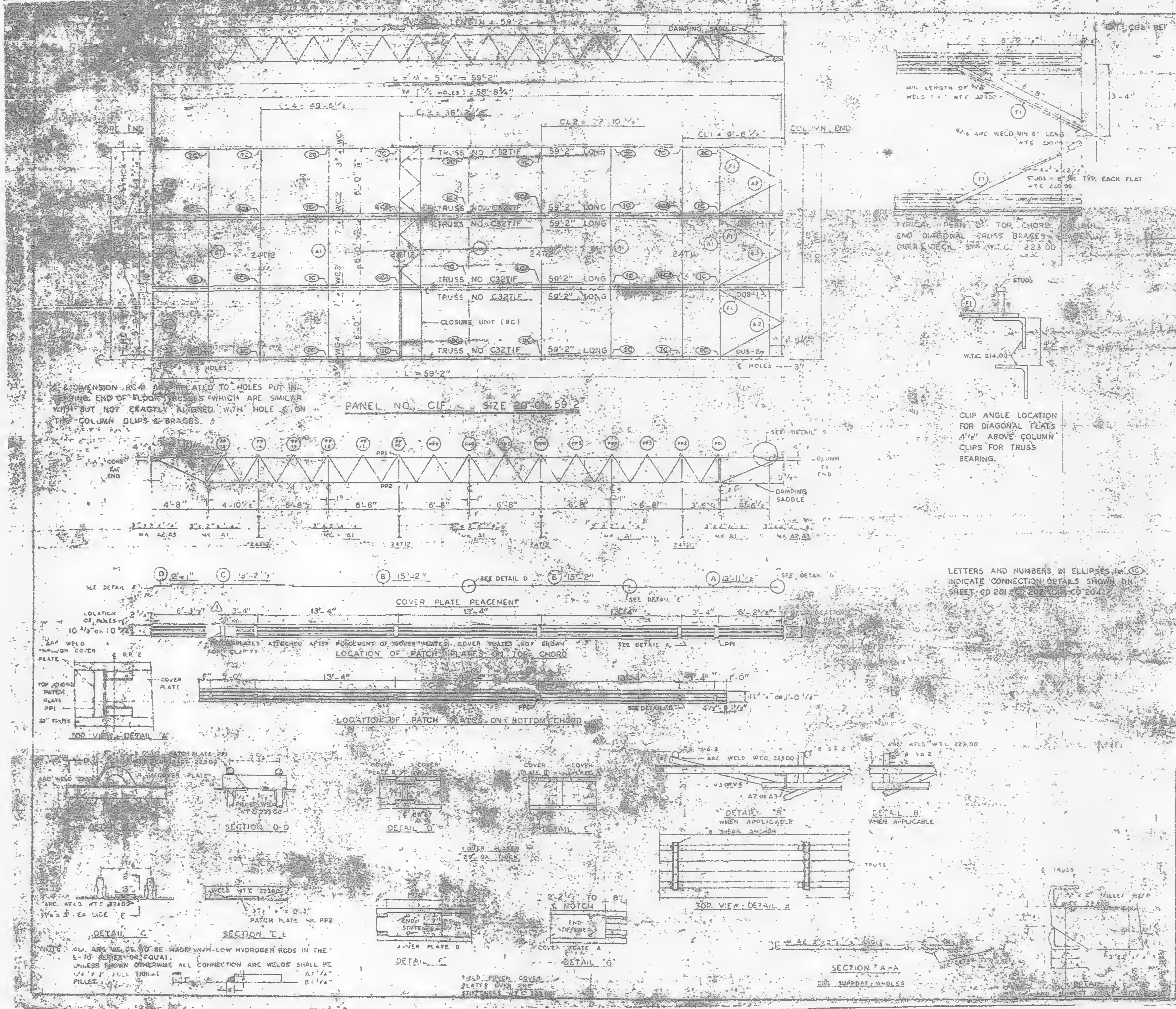
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	REQ	SIZE	
[illegible] TRUSSES	E	[illegible]	32TIE [illegible]	ST 201E
[illegible] TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
	T12	3	24T12 [illegible]	ST 212
[illegible] ANGLE	A1	5	3" x 2" x [illegible] x 9 [illegible]	ST 403
	A2	[illegible]	[illegible]	ST 403
	[illegible]	[illegible]	[illegible]	ST 403
[illegible]	[illegible]	[illegible]	[illegible]	ST 402
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible] 3"	ST 400
	[illegible]	3	[illegible] 2'-1"	[illegible]
ANGLE CLIP	[illegible]	[illegible]	[illegible]	ST 400
[illegible]	SA2	5	[illegible] 0'-9"	ST 400
DAMPING [illegible]	[illegible]	[illegible]	6 7/8	[illegible]
		1	6 7/8	[illegible]
CONNECTION BAR	CB1	4	[illegible] 1'-3"	ST 400
CLOSURE UNIT	BC	3	[illegible]	BT 212
			[illegible] 6 1/2"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-6-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.C.

10-15-68
7-22-68
7-22-68
1-6-69
7-22-68
7-22-68
10-15-68

BLDG. A [illegible] 10-11 (NORTH & SOUTH)
PANEL C1E [illegible]

FABRICATION BY [illegible] STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION James White DATE 1/2/70
APPROVAL FOR FABRICATION DATE
BY [illegible] FABRICATOR
DESIGN DRAWING NO. [illegible]
PLATE
DRAWN BY [illegible]
DATE APRIL 10, 1969
CHECKED BY J.R. DALE
DATE APRIL 10, 1968
IN CHARGE OF PROD. DEV.
FABRICATION CONT. NO. 221
SHEET NO. EP C1E
[illegible] STEEL CO.



℄ & DIMENSION RC-4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 & CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x F FULL THROAT FILLET. A = ¼" B = ¼"

REQUIRED MATERIAL [illegible] PANEL				
MATERIAL	MK	PCS	SIZE	[illegible] DWG
FLOOR TRUSSES	T1F	6	C32T1F 59'-2"	ST 5?F
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT 210
	T12	3	24T12 - 19'-11"	BT 2[illegible]
3x2 x ¼ ANGLE	A1	5	3"x2"x¼"x 19'-11"	ST 403
	A2	4	3"x2"x¼"x 8'-11"	ST 402
	A3	2	3"x2"x¼"x 5'-11¼"	ST 403
DIAGONAL FLATS	F1	6	1½"x⅝"x [illegible]	ST 402
PATCH PLATES	PP1	18	2"x¾"x 0'-3"	ST 400
	PP2	18	3"x⅜"x 0'-3"	ST 400
COVER PLATES	A	3	9"x.0135"x 6'-1½"	ST 303
	B	3	8"x.0135"x 13'-2½"	ST 303
	C	3	8"x.0135"x 13'-2½"	ST 303
	D	3	9"x.0135"x 2'-1"	ST 303
ANGLE CLIPS	C1	21	8"x1½"x¼"x 0'-5"	ST 400
B SHEAR ANCHOR	SA2	9	9 REBAR x 0'-5"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅜"x 3'-5⅞"	ST 295
	DUS-2	1	3½"x3½"x⅜"x 3'-6"	ST 295
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CLOSURE UNIT	8C	3	2.4x1½"x1¼"x[illegible]	ST 212
			.250 x 5'-6½"	CD 204
CONNECTION PLATES	P1	5	3½"x⅜"x 0'-6½"	ST 400
	P2	4	4½"x.39"x 0'-9"	ST 400
	P3	1	4½"x.39"x 1'-0"	ST 400

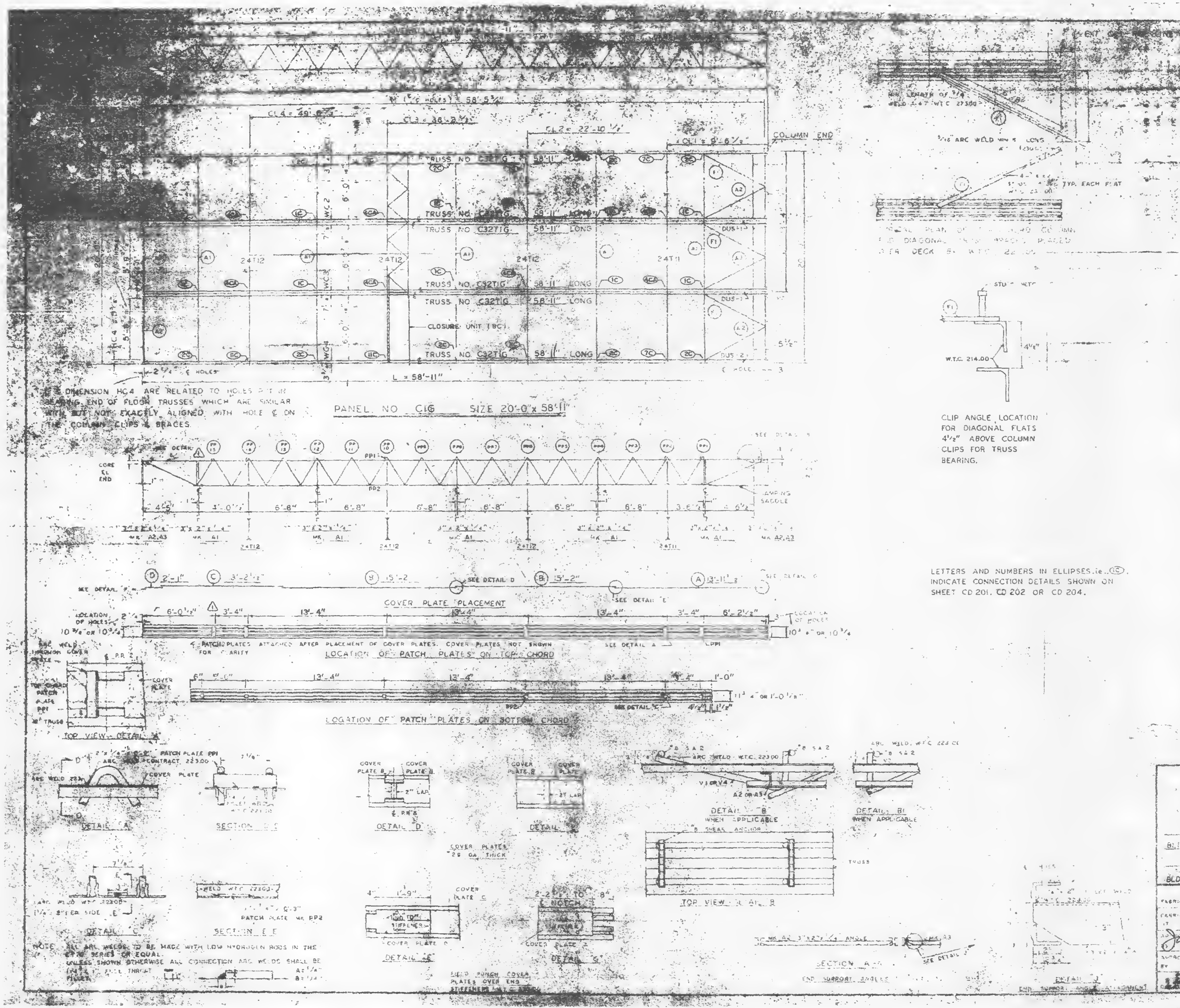
NO.	DATE	REVISION	BY
⚠ 1	6-6-69	AS NOTED	GDC

⚠ 1 REF DRWG
7-AR4-3 10-15-68
7-AB4-15 & 18 7-22-68
7-AB4-39 & 41 7-22-68
SA-124 1-6-69
7-AB3-2 [illegible]
7-AB1-2 7-22-68
7-AB2-6 & 7 7-22-68
7-AB4-42 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOOR 47-48 (N & S), 70-71 (N)
PANEL C1F - 20'-0" x 59'-2"
BLDG. B FLOORS 47-48 (EAST & WEST) 70-71 (WEST) ⚠ 1

FABRICATION BY LA CLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-7
APPROVED FOR FABRICATION James White N.Y.A. DATE 1/2/70
DRAWN BY [illegible] DATE 10-24-68
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
CHECKED BY T.M. CHURA IN CHARGE OF [illegible]
DATE 10-24-68
[illegible] STEEL CO.
DETAILED BY A.C. [illegible]
FABRICATION CONT. NO. [illegible] WTC 221 F


CL4 = 49'-6"
CL3 = 38'-2"
CL2 = 22'-10 1/2"
CL1 = 8'-6 1/2"
58'-5 3/4"
COLUMN END
TRUSS NO. C32T1G 58'-11" LONG
TRUSS NO. C32T1G 58'-11" LONG
TRUSS NO. C32T1G 58'-11" LONG
TRUSS NO. C32T1G 58'-11" LONG
TRUSS NO. C32T1G 58'-11" LONG
CLOSURE UNIT (BC)
24T12
24T12
24T12
24T11
DUS-1
DUS-2
L = 58'-11"
2 1/4" ℄ HOLES
HC4 DIMENSION HC4 ARE RELATED TO HOLES ℄ IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
PANEL NO. C1G SIZE 20'-0" x 58'-11"
CORE ℄ END
PP1
PP2
BEARING SADDLE
4'-5"
3'-0 1/2"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
6'-8"
3'-6"
6 1/2"
3"x2"x1/4" MK A2, A3
3"x2"x1/4" MK A1
3"x2"x1/4" MK A1
3"x2"x1/4" MK A1
3"x2"x1/4" MK A1
3"x2"x1/4" MK A1
MK A2, A3
24T12
24T12
24T12
24T11
D 2'-1"
C 3'-2 1/2"
B 15'-2"
SEE DETAIL D
B 15'-2"
SEE DETAIL E
A 13'-11"
SEE DETAIL C
SEE DETAIL F
COVER PLATE PLACEMENT
LOCATION OF HOLES 10 3/4" OR 10 1/2"
6'-0 1/2"
3'-4"
13'-4"
13'-4"
13'-4"
3'-4"
6'-2 1/2"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
SEE DETAIL A
LOCATION OF PATCH PLATES ON TOP CHORD
6"
13'-4"
13'-4"
13'-4"
1'-0"
SEE DETAIL
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW - DETAIL A
PATCH PLATE PP1
ARC WELD W.T.C. 223.00
COVER PLATE
DETAIL A
SECTION C-C
COVER PLATE B
COVER PLATE B
2" LAP
DETAIL D
DETAIL
ARC WELD W.T.C. 223.00
A2 OR A3
DETAIL B WHEN APPLICABLE
DETAIL B1 WHEN APPLICABLE
TOP VIEW DETAIL B
TRUSS
COVER PLATES 28 GA. THICK
ARC WELD W.T.C. 223.00
1 1/4" STEP SIDE E
DETAIL C
WELD W.T.C. 223.00
PATCH PLATE MK PP2
SECTION E-E
1'-9"
COVER PLATE C
COVER PLATE D
DETAIL E
DETAIL F
SIDE PUNCH COVER PLATES OVER END STIFFENERS
MK A2 3"x2"x1/4" ANGLE
SEE DETAIL
SECTION A-A
END SUPPORT ANGLES
DETAIL
END SUPPORT
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET THROAT
A = 1/4"
B = 1/4"
MIN. LENGTH OF 1/4" WELD 4" W.T.C. 223.00
3/16" ARC WELD MIN. 5" LONG
TYP. EACH FLAT
PLAN OF COLUMN FOR DIAGONAL BRACES PLACED AFTER DECK W.T.C. 223.00
STUD
F1
W.T.C. 214.00
4 1/2"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DWG.
FLOOR TRUSSES	T1G	6	C32T1G 58'-11"	[illegible]
BRIDGING TRUSSES	T1	1	24T11 - 19'-10"	[illegible]
	T2	3	24T12 - 19'-10"	BT212
3"x2"x1/4" ANGLE	A1	5	3"x2"x1/4"x 19'-11"	ST 400
	A2	4	3"x2"x1/4"x 5'-11 3/4"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	4	1 1/2" x 1/4" x 8'-6"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-5"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	[illegible]	ST 303
	B	6	[illegible] x 15'-2"	ST 303
	C	3	[illegible] x 3'-2 1/2"	ST 303
	D	3	[illegible] x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
SHEAR ANCHOR	SA2	9	REBAR x 0'-6"	ST 400
BEARING SADDLE	DUS-1	2	[illegible]	ST 290
	DUS-2	1	[illegible]	ST 298
CONNECTION BAR	CB1	4	1" x 1'-5"	ST 400
CLOSURE UNIT	BC	3	2" x 1 1/2" x 1 1/2" x .230 x 5'-6 1/2"	BT 212 CD 204
CONNECTION PLATES	P1	[illegible]	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
⚠1	6-6-69	AS NOTED	GDC

⚠1

7-AB4-[illegible]	10-15-68
7-AB4-[illegible]	7-22-68
AB-39 & 41	7-22-68
SA-12-[illegible]	1-6-69
7-AB3-[illegible]	1-3-68
7-AB1-2	7-22-68
7-AB2-[illegible]	7-22-68
7-AB4-47	10-15-68

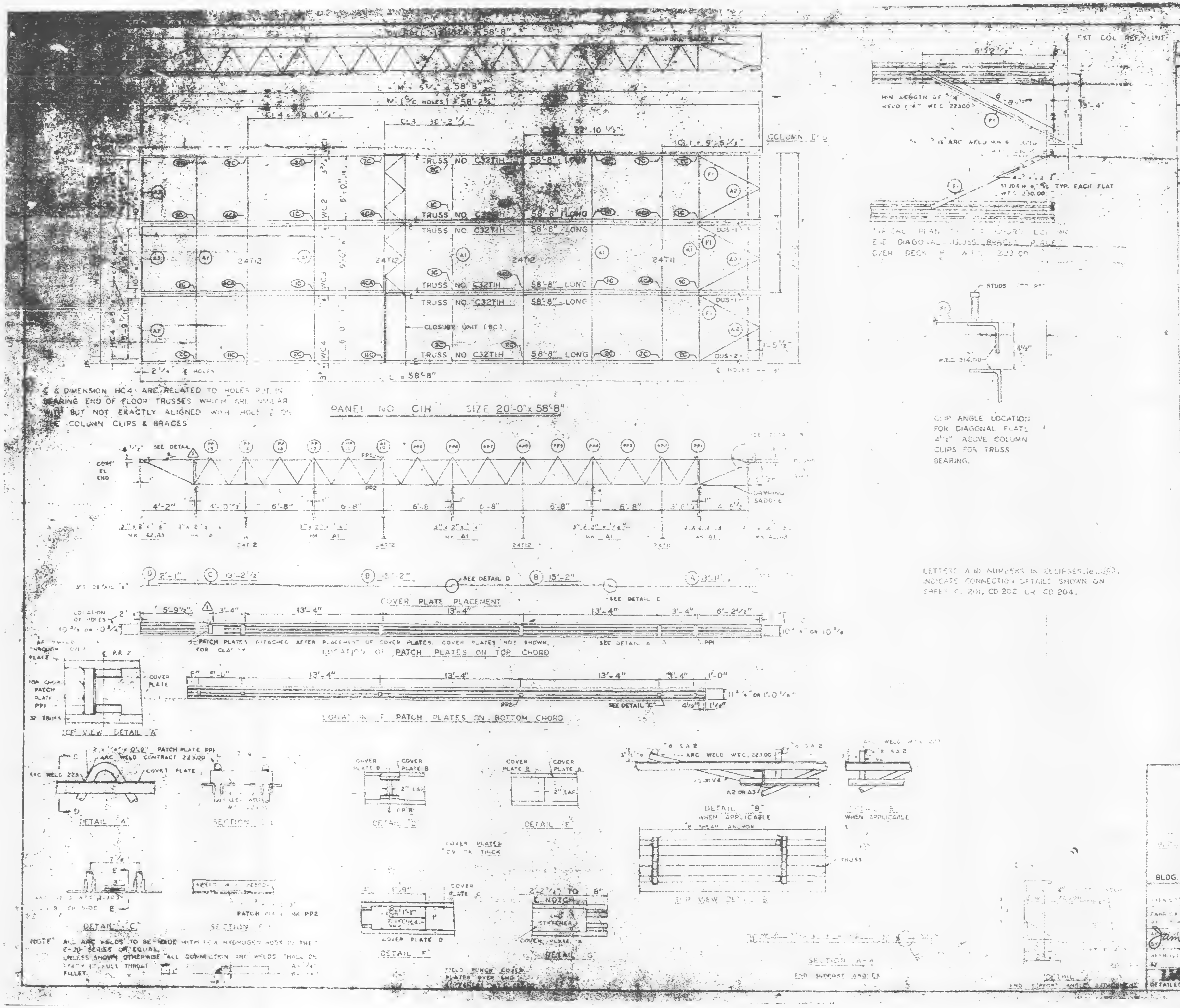
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N & S)

[illegible] G [illegible] x 58'-11"

BLDG. B FLOORS 39-40 (EAST & WEST) ⚠1

FABRICATED BY LACLEDE [illegible]
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING [illegible]
PLATE [illegible]
James White 1/2/70
DATE 10-24-68
APPROVED FOR FABRICATION BY OR FABRICATOR
DATE
CHECKED BY T. M. CHURA
DATE 10-24-68
IN CHARGE OF [illegible]
[illegible] CONT. NO. 22
SHEET NO. FP-C1G



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES

PANEL NO. C1H SIZE 20'-0" x 58'-8"

TYPICAL PLAN OF DIAGONAL BRACE PLATE OVER DECK

CLIP ANGLE LOCATION FOR DIAGONAL PLATE 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (IC), INDICATE CONNECTION DETAILS SHOWN ON SHEET C. 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1 1/2" FULL THROAT FILLET.

REQUIRED MATERIAL FOR PANEL				
MATERIAL	MK	PCS	SIZE	REF. DWG.
FLOOR TRUSSES	T1H	5	C32T1H 58'-8"	ST 20[illegible]
BRIDGING TRUSSES	T11	1	24T11 19'-[illegible]	ST211
	T12	3	24T12 19'-11"	ST 212
3 x 2" x 1/4" ANGLE	A1	5	3"x2"x 1/4" x 19'-0"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL PLATE	F1	6	1 1/2" x 1/4" x 0'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" [illegible]	ST 400
COVER PLATES	A	3	[illegible] .035" [illegible]	ST 303
	B	[illegible]	[illegible] x .035" x [illegible]	ST 303
		[illegible]	[illegible] x 0.35" x 3'-2"	ST 303
		[illegible]	[illegible] .035" x 2'-1"	ST 303
ANGLE CLIPS	[illegible]	21	[illegible] x 2 1/2" x [illegible]	ST 400
[illegible]	SA2	9	[illegible] x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	[illegible] x 3'-6 7/8"	ST 200
	DUS-2	[illegible]	[illegible] x 3'-6 7/8"	ST 258
CONNECTION BAR	CB1	4	[illegible] x 1'-3"	ST 400
CLOSURE UNIT	S	[illegible]	[illegible] x 2 x 1 1/2" x [illegible]	ST 212
			230 x 5'-6 1/2"	[illegible] 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	1	[illegible] x .39" x 0'-9"	ST 400
	P3	[illegible]	[illegible] x .39" x 1'-[illegible]	ST 400

1	6-6-69	AS NOTED	G.D.C.
NO.	DATE	REVISION	BY.

1
10-15-68
7-22-68
39641 7-22-68
1-6-69
1-3-69
7-22-68
7-22-68
10-15-68

79-80(N)

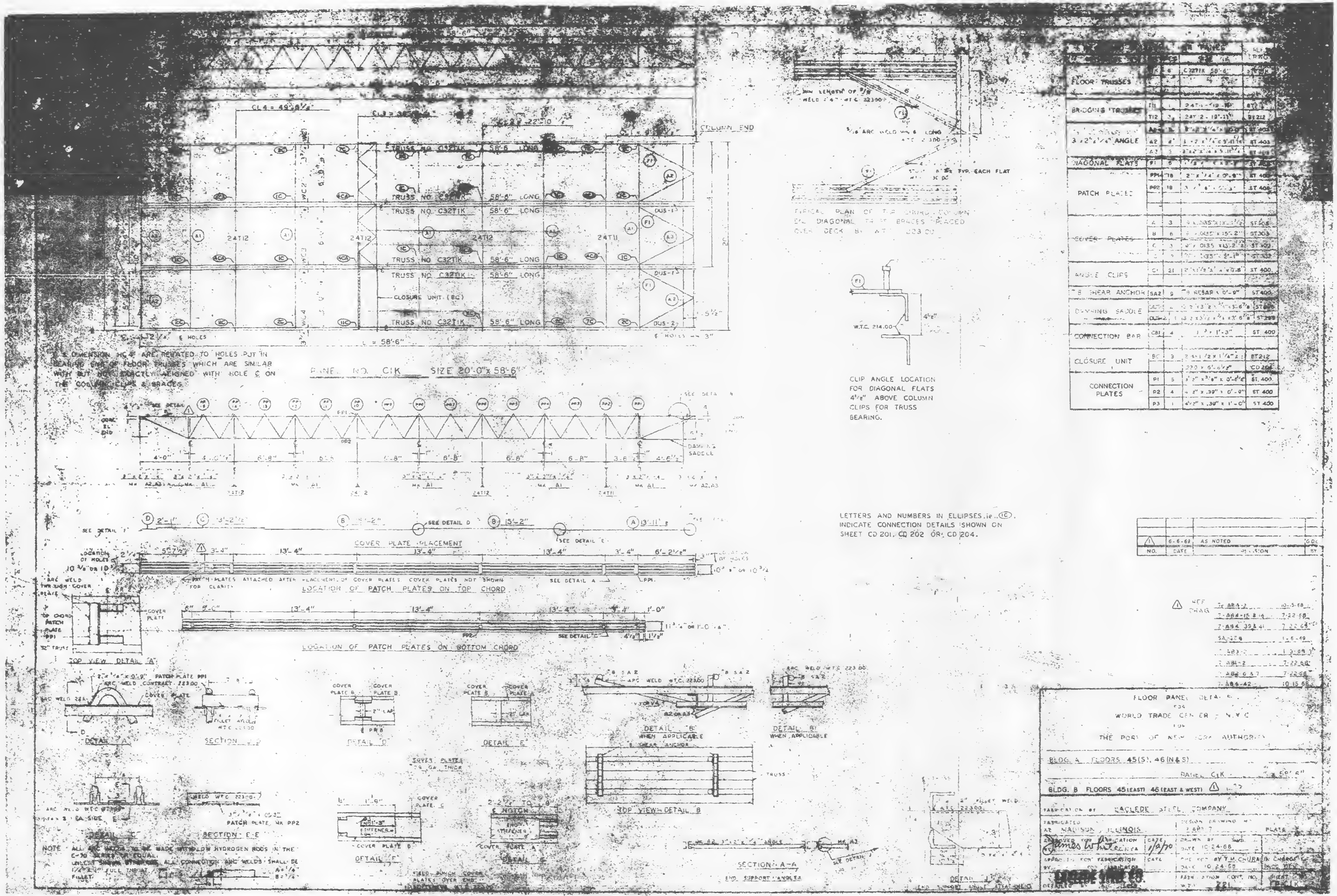
x 58'-8"

BLDG. B FLOORS 79-80 (WEST) 1

7-22-68

James White 1/2/70

DRAWN BY [illegible]
DATE 10-24-68
CHECKED BY T.M. CHURA
DATE 10-24-68
IN CHARGE OF PROD. DEV.
FABRICATION CONT. NO. 221
DETAILED BY JACK WEBER



LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DIMENSIONS MARKED ⚠ ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" 2-4" FULL THROAT FILLET.

			[illegible]	REF DRWG
FLOOR TRUSSES	K	6	C32T1K 58'-6"	ST [illegible]
BRIDGING TRUSSES	T11	1	24T11 - 19'-10"	BT211
	T12	3	24T12 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	[illegible]	3"x2"x1/4"x[illegible]	ST 403
	A2	4	3"x2"x1/4"x5'-11 1/16"	ST 403
	A3	3	3"x2"x1/4"x5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	5	[illegible]	ST 40[illegible]
PATCH PLATES	PP1	18	2"x1/4"x0'-9"	ST 400
	PP2	18	3"x[illegible]"x0'-3"	ST 400
COVER PLATES	A	3	9"x.0135"x13'-11 1/2"	ST 303
	B	6	9"x.0135"x15'-2"	ST 303
	C	3	9"x.0135"x13'-2 1/2"	ST 303
	D	[illegible]	9"x.0135"x2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1 1/2"x1/4"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	[illegible] x 3 1/2" x 3/4" x 3'-6 7/8"	ST 2[illegible]
	DUS-2	1	[illegible] x 3 1/2" x 3/4" x 3'-6 7/8"	ST 2[illegible]
CONNECTION BAR	CB1	4	1 3/4" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 1/2 x 1 1/2 x 1 1/4 x 2	BT212
			220 x 6'-6 1/2"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

⚠	6-6-69	AS NOTED
NO.	DATE	REVISION

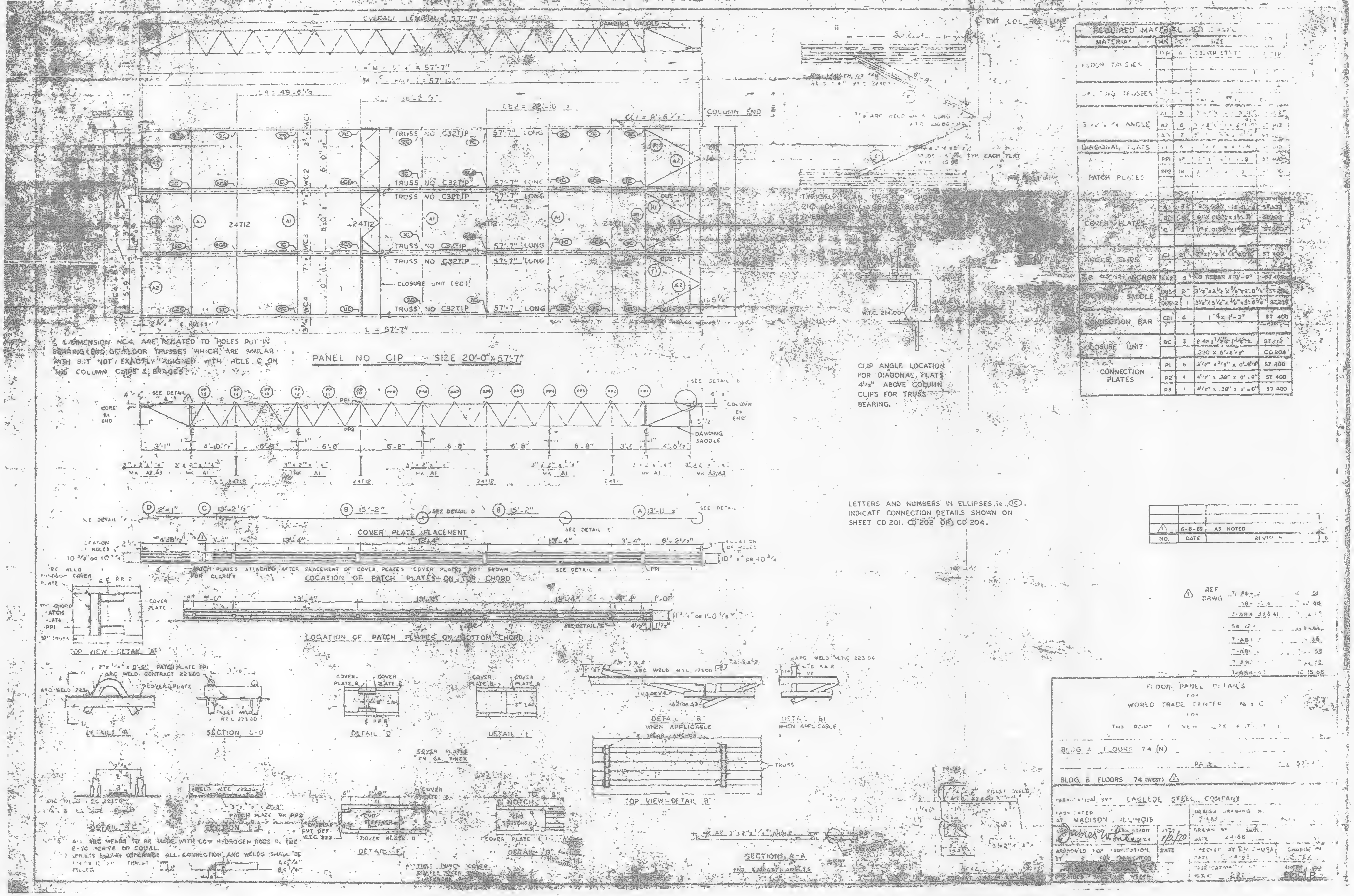
⚠ REF DRAG

7-AB4-2	10-5-68
7-AB4-15 & 14	7-22-68
7-AB4-39 & 41	7-22-68
SA-224	1-6-69
7-AB3-2	1-3-69
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45(S), 46(N&S)
PANEL C1K - 20' x 58'-6"
BLDG. B FLOORS 45(EAST) 46(EAST & WEST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB4-7
APPROVED FOR FABRICATION BY James White
DATE 1/9/70
DRAWN BY [illegible] DATE 10-24-68
CHECKED BY Y.M. CHURA DATE 10-24-68
IN CHARGE [illegible]
LACLEDE STEEL CO.
DETAILED BY [illegible]
FABRICATION CONT. NO. W.T.C. 221
SHEET FP-C1K



L & DIMENSION WC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. ⓒ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FILLET.

REQUIRED MATERIAL [illegible]

MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIP	6	C32TIP 57'-7"	[illegible]
[illegible] TRUSSES				
3½" x [illegible] ANGLE	A1	5	[illegible]	[illegible]
	A2	6	[illegible]	[illegible]
	A3	7	[illegible]	[illegible]
DIAGONAL FLATS	[illegible]	5	[illegible]	[illegible]
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible]	[illegible]
COVER PLATES	A	3	9" x .0135 x 13'-4½"	ST 203
	B	6	9" x .0135 x 15'-3"	ST 203
	C	3	9" x .0135 x 14'-[illegible]	ST 203
ANGLE CLIPS	CJ	21	2" x 1½ x ¼ x 0'-[illegible]	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3½" x 3½" x ⅜" x 3'-8⅞"	ST 258
	DUS2	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST 258
CONNECTION BAR	CB1	4	1¼" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1½" x 1½" x [illegible]	ST 212
			230 x 6'-6½"	CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

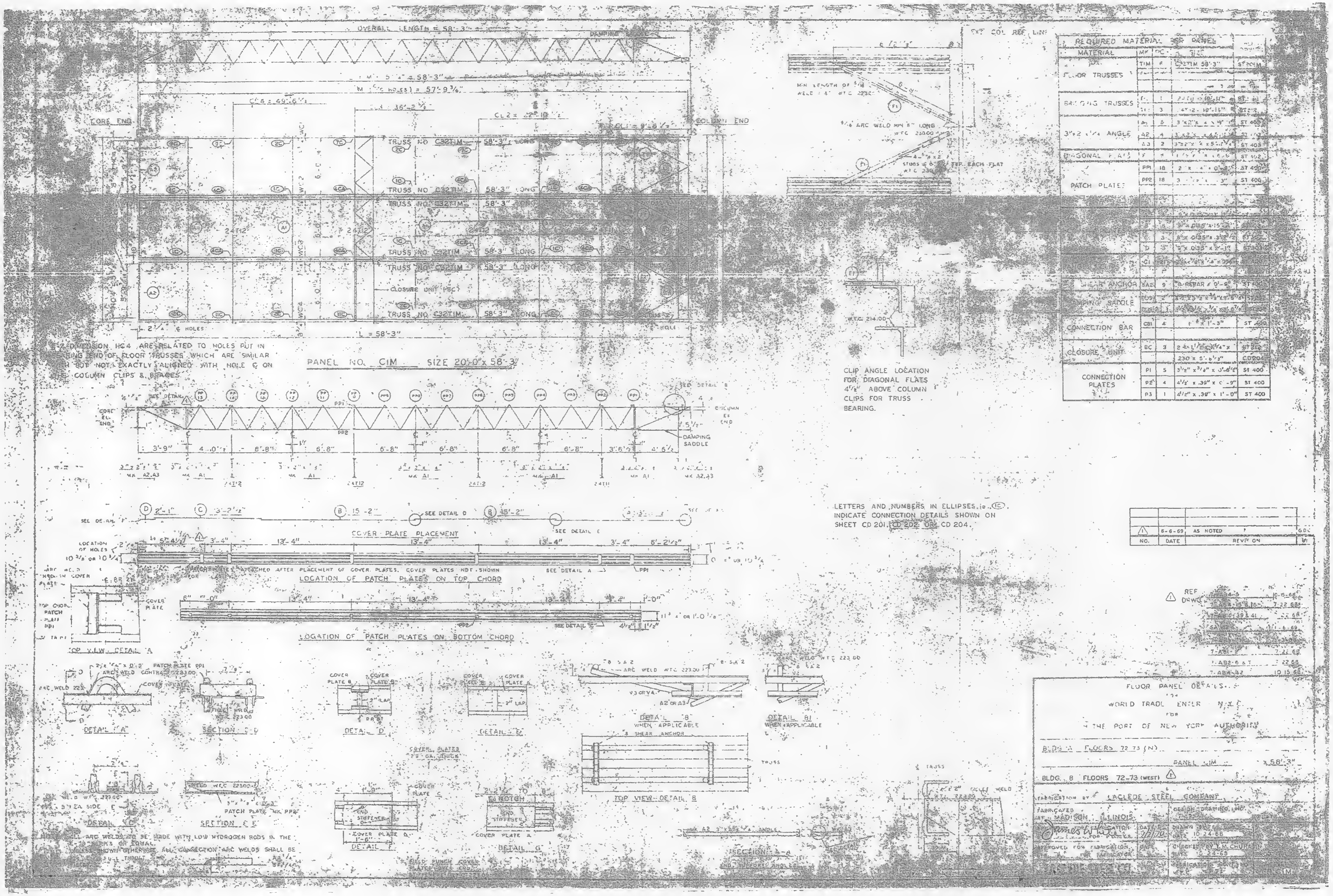
NO.	DATE	REVISION
1	6-6-69	AS NOTED

REF DRAWG 7-AB4-[illegible]
7-AB4-38 41
7-AB4-[illegible]
SA [illegible]
7-AB[illegible]
7-AB[illegible]
7-AB[illegible]
7-AB4-42 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N)
BLDG. B FLOORS 74 (WEST) ⚠1

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION James White DATE 1/2/70
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
DESIGN DRAWING No. 7-AB3
DRAWN BY [illegible] DATE [illegible]-4-68
CHECKED BY T.M. CHUBA DATE [illegible]-24-69
SHEET NO. [illegible] C1P



DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES.

PANEL NO. C1M SIZE 20'-0" x 58'-3"

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT

REQUIRED MATERIAL FOR PANEL				
MATERIAL	MK	PC	SIZE	[illegible]
FLOOR TRUSSES	TIM	6	C32TIM 58'-3"	ST 201M
BRIDGING TRUSSES	[illegible]	1	[illegible]	[illegible]
	[illegible]	3	[illegible]	ST 212
3"×2"×1/4 ANGLE	A1	6	[illegible]	ST 403
	A2	4	[illegible]	[illegible]
	A3	2	3"×2"×1/4 x 5'-1 1/4"	ST 403
DIAGONAL FLATS	[illegible]	[illegible]	[illegible]	ST 402
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible]	ST 400
COVER PLATES	[illegible]	[illegible]	[illegible]	[illegible]
	B	6	9" x .035" x 15'-2"	[illegible]
	C	3	9" x .035" x 3'-2 1/2"	[illegible]
	D	3	9" x .035" x 2'-1"	[illegible]
ANGLE CLIPS	C1	21	[illegible]	[illegible]
SHEAR ANCHOR	SA2	9	8-REBAR x 0'-9"	ST 400
DAMPING SADDLE	DS1	2	[illegible]	[illegible]
	DS2	1	[illegible]	[illegible]
CONNECTION BAR	CB1	4	[illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC	3	[illegible]	ST 212
			230 x 5'-6 1/2"	CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
⚠1	6-6-69	AS NOTED	GDC

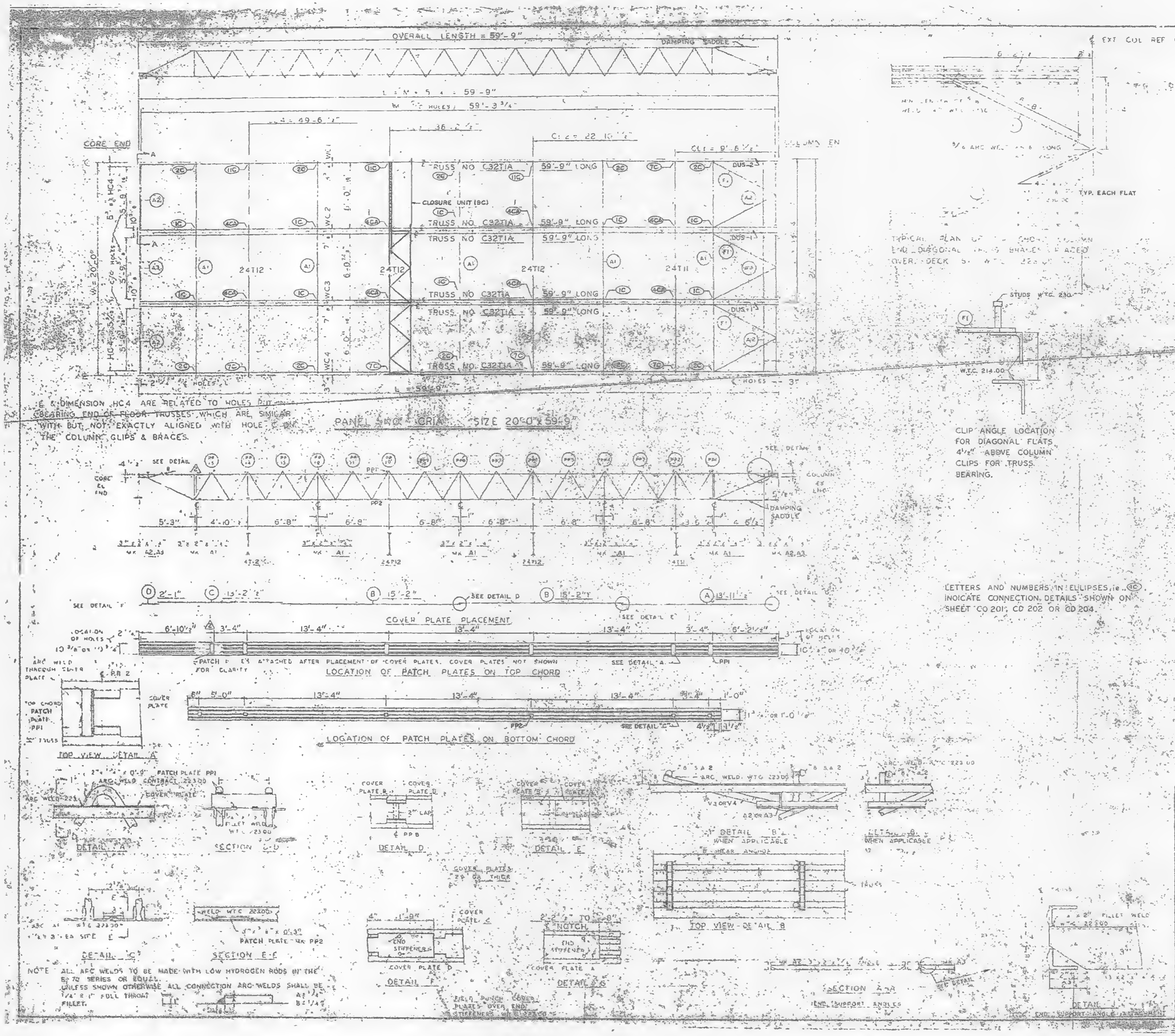
⚠1 REF DRWG

[illegible]	10-6-68
[illegible] 15 & 16	7-22-68
[illegible] 39 & 41	[illegible] 22 68
SA [illegible]	[illegible]-6-69
[illegible]	[illegible]
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL C1M x 58'-3"
BLDG. B FLOORS 72-73 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. [illegible]
James White FOR FABRICATOR DATE 7/2/70
DRAWN BY [illegible] DATE 10-24-68
APPROVED FOR FABRICATION FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE 10-24-68
FABRICATION [illegible]
C1M



E & DIMENSION HC4 ARE RELATED TO HOLES BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" & 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	6	C32T1A - 59'-8"	ST 204A
BRIDGING TRUSSES	T11	1	24T11 - [illegible]	[illegible]
	T12	3	24T12 - 19'-11"	BT 212
3 x 2 x ¼ ANGLE	A1	3	3"x2"x¼" x 19'-11"	ST 403
	A2	4	3"x2"x¼" x 5'-11⅛"	ST 403
	A3	2	3"x2"x¼" x 5'-11¾"	ST 403
DIAGONAL FLATS	F1	5	[illegible] x 6'-9"	ST 402
PATCH PLATES	PP1	18	2 x [illegible] 9	ST 400
	PP2	18	[illegible] 3"	ST 400
COVER PLATES	A	3	9" x .0135 x 3'-11½	ST 303
	B	6	9" x .0135 x 5'-2"	ST 303
	C	3	9" x .0135" x 3'-2½	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2" x 1½" x ¼" x 0'-5"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x ⅜" x 3'-6⅞"	ST 298
	DUS-2	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST 298
CONNECTION BAR	CB1	4	1" x [illegible] 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1½" x 1¼" x 230 x 6'-6½"	BT 212 CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

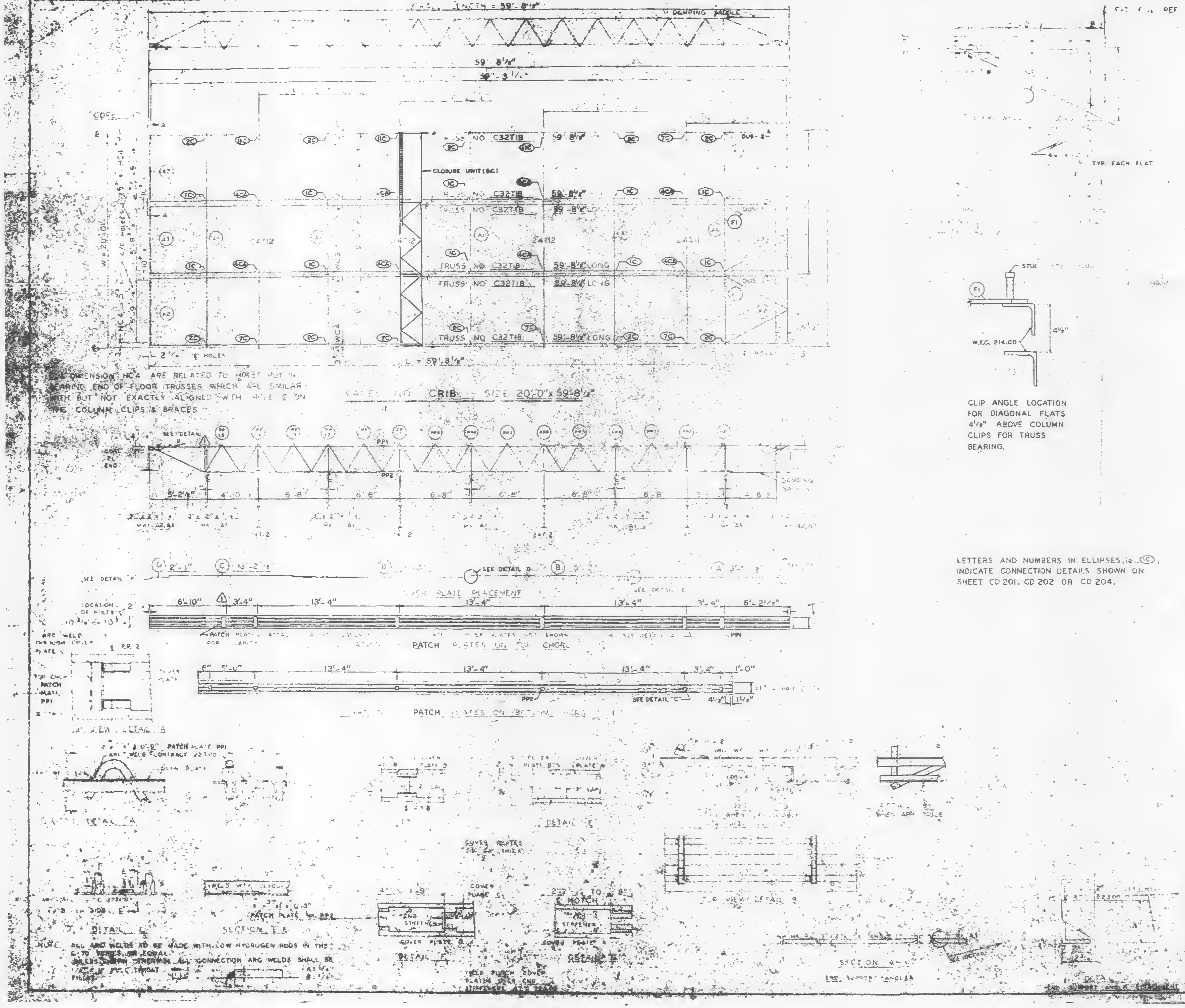
NO.	DATE	REVISION	BY
2	5-6-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.C.

2 REF D-WC
7-AB[illegible] 10-15-68
AB4 [illegible] 7-22-68
AB4 41 7-22-68
5A [illegible] 1-6-69
AB3-2 [illegible]-3-68
AB1 2 7-22-68
AB2 5 & 7 7-22-68
7-AB4-42 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH), 49-58, 60-66, 68, 69 (NORTH) PANEL CRIA - 20'-0" 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-[illegible] 2

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-8 4-1-68 PLATE
APPROVED FOR FABRICATION BY James White DATE 1/2/70
DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY J.R. PAUL DATE APRIL 10, 1968
IN CHARGE OF PROD DEV
DETAILED
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-CRIA



"E DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. ⓘⒸ, INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PC	SIZE	
FLOOR TRUSS		8	...18 - 59'-8½"	ST201B
[illegible]	[illegible]2	3	24T12 19'-11"	BT212
ANGLE	A1	5	[illegible] 9'-11"	ST 403
	A2	4	[illegible] 4 x 5 [illegible]	ST 403
	[illegible]	[illegible]	[illegible] ¾"	ST 403
[illegible]	[illegible]	[illegible]	[illegible]	ST 402
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible] 3"	ST 400
COVER PLATES	A	3	[illegible] 3'-11½"	ST303
	B	5	[illegible] x 15-2	ST303
	C	3	[illegible] 2'-2½"	ST303
	D	3	[illegible] 2'-1"	ST303
ANGLE CLIPS	[illegible]	21	2 x [illegible] x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x ⅜" x 3'-6⅞"	ST298
	DUS-2	1	[illegible] x ⅜ x 3-6⅞"	ST298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 [illegible] 1½" x 1¼" x .230 x 6'-6½"	BT212 CD204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
⚠1	6-9-69	AS NOTED	G.D.C.

⚠1

[illegible]	10-15-68
[illegible] 15,16	7-22-68
[illegible] AB4 4[illegible]	7-22-68
[illegible]A 2[illegible]	1-6-69
7-AB3[illegible]	[illegible]
7-AB1-2	7-22-68
AB2-6 & 7	7-22-68
7-AB4-4[illegible]	10-15-68

[illegible] TAILS

[illegible] C

83-91 & 93-106 (N)

PANEL CRIB [illegible] x 59'-8½"

BLDG. B FLOORS 83-91 & 93-106 (WEST) ⚠1

FABRICATION BY [illegible]CLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7 AB3 8

PLATE

APPROVED FOR FABRICATION BY James White FOR [illegible] DATE 1/2/70

DRAWN BY [illegible] DATE OCT 23, 1968

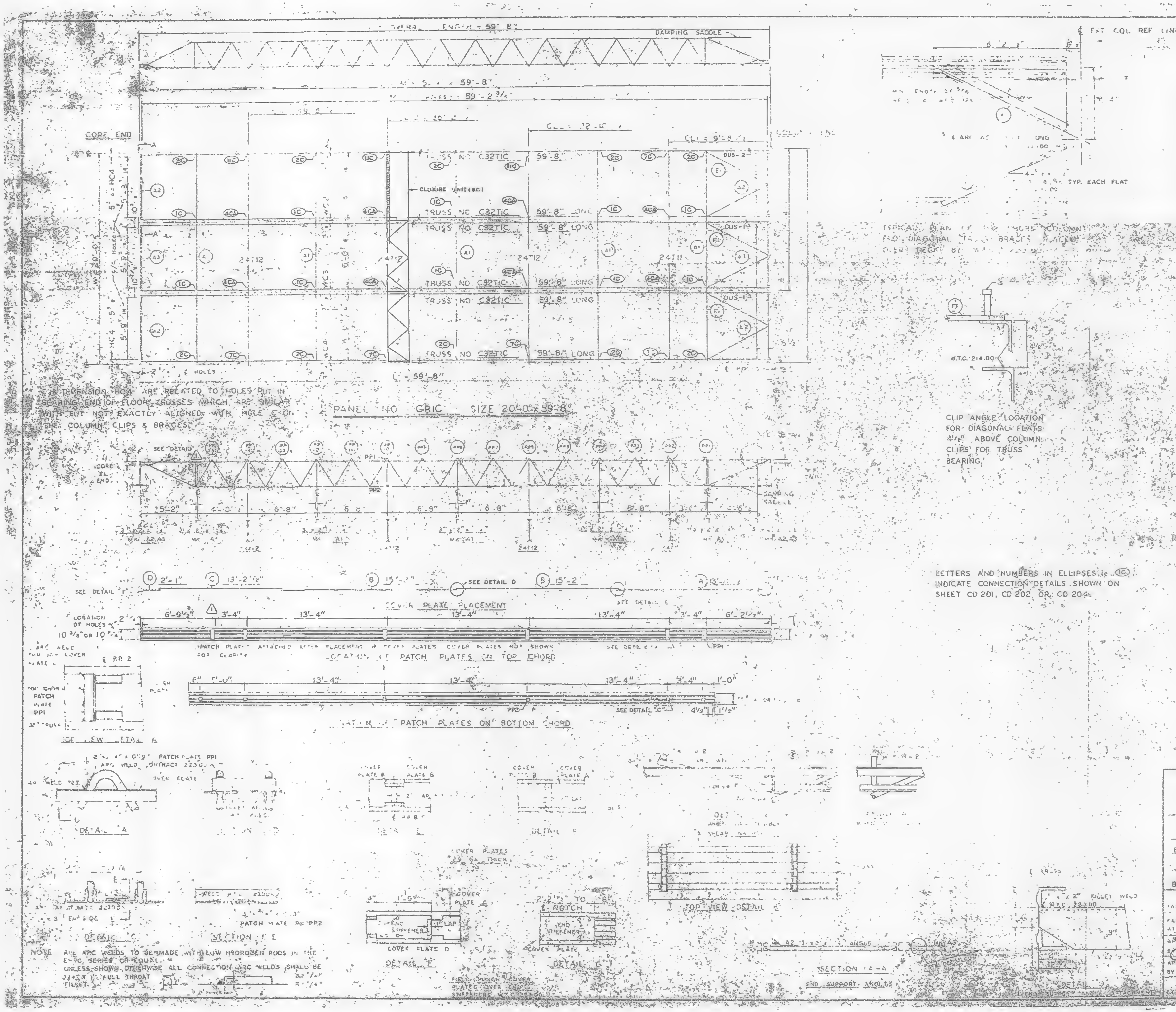
APPROVED FOR FABRICATION BY FOR FABRICATION DATE:

CHECKED BY T.M.CHUR[illegible] DATE OCT 23, 1968

DETAILED BY [illegible]

FABRICATION CONT. NO. W.T.C. 921

SHEET [illegible]



DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF [illegible] COLUMN FOR DIAGONAL TRUSS BRACES PLACED OVER DECK BY [illegible]

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 3/16" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	C	[illegible]	C32TIC - 59'-8"	ST201C
BRIDGING TRUSSES	[illegible]	[illegible]	24T[illegible]	[illegible]
	[illegible]2	3	24T12 - 19'-11"	BT212
3" x 2" x 1/4" ANGLE	A1	9	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 9/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/4"	ST 403
DIAGONAL FLATS	F1	6	1" x 2" x [illegible] x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x [illegible] 5"	ST 400
	PP2	18	3" x [illegible] 3"	ST 400
COVER PLATES	A	3	9" x .085" x 13'-11 1/2"	ST303
	B	6	9" x .085" x 5'-2"	ST303
	C	3	9" x .0135" x 13'-2 1/2"	ST303
	D	3	9" x .085" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS 2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 5/8" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 x 1 1/2" x 1 1/4" x .230 x 6'-6 1/2"	BT212 CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
⚠1	6-9-69	AS NOTED	G.D.C.

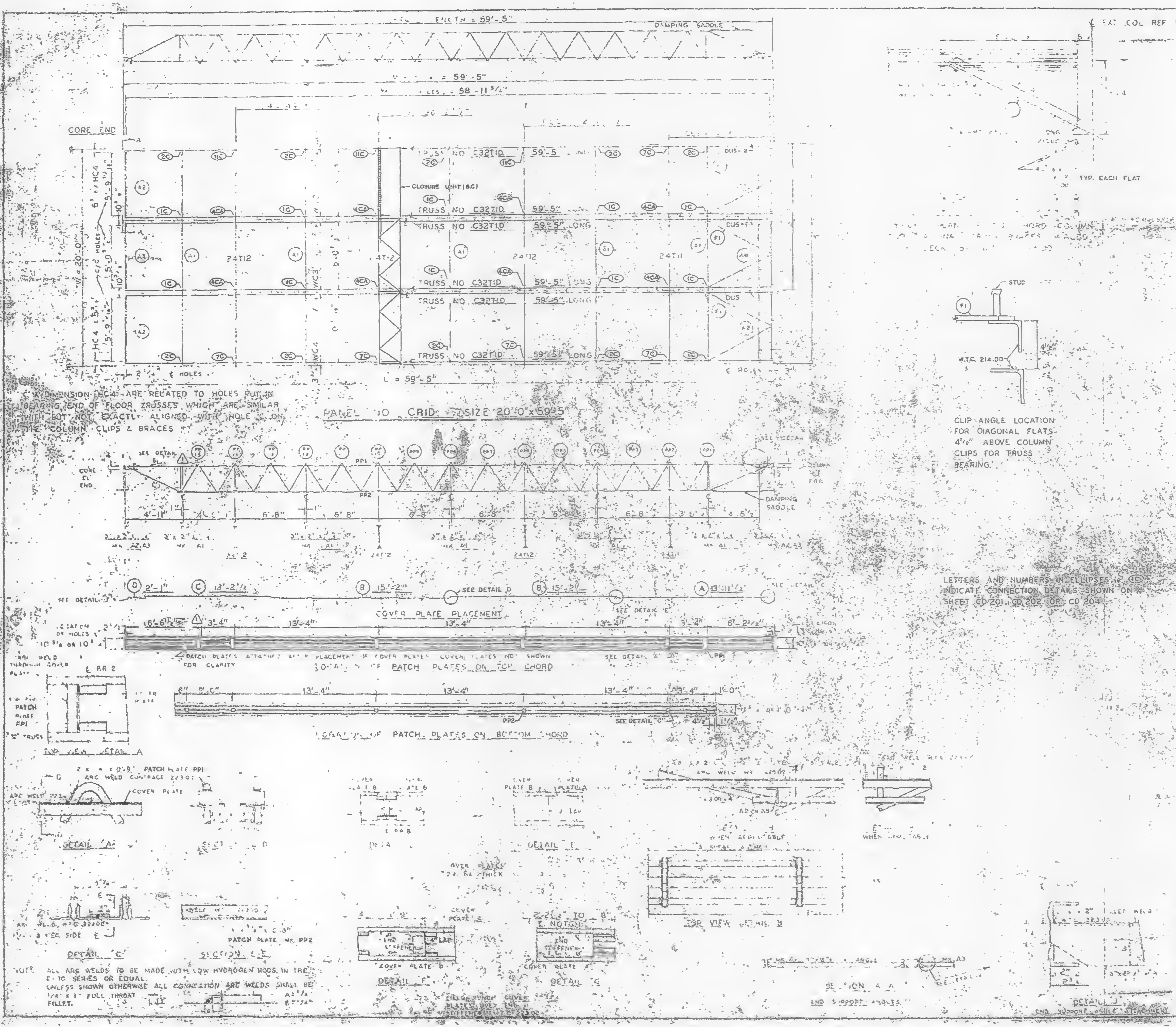
⚠1 REF. DRWG

7-AB4-3	10-15-68
7-AB4-15,16 & 39	7-22-68
7-AB4-41	7-22-68
SA-12.4	1-6-69
7-AB3-2	1-3-68
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

[illegible] STEEL [illegible]S
FOR
[illegible]
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 49-58, 60-66, 68-74, 79-91 & 93-106 (S)
PANEL GRIC 20'-0" x 59'-8"
BLDG. B FLOORS 49-58, 60-74, 79-91 & 93-106 (EAST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-8
PLATE
APPROVED FOR FABRICATION BY James White P.N.Y.A. DATE 1/2/70
DRAWN BY [illegible] DATE OCT. 23, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
CHECKED BY T.M.CHURA DATE OCT. 23, 1968
IN CHARGE OF PRODUCTION
DETAILED BY [illegible] C. WEBER
FABRICATION CONT. NO. W.T.C. [illegible]
SHEET NO. GRIC



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1D	3	C32T1D - 59'-5"	ST201D
[illegible] TRUSSES	[illegible]	1	24T[illegible] - 19'-11"	BT2[illegible]
	T12	3	24T12 - 19'-11"	BT212
[illegible] ANGLE	A1	3	3 x 2 x [illegible] x 19'-11"	ST 403
	A2	4	3 x 2 x 1/4 x 5'-11 [illegible]	ST 403
	A3	2	3 x 2 x [illegible] x 5 [illegible] 3/4"	ST 403
DIAGONAL FLATS	F	5	2 x [illegible] x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x [illegible] x 0-9"	ST 400
	PP2	18	[illegible] - 3"	ST 400
COVER PLATES	A	3	9" x .0135 x 13'-11 1/2	ST303
	B	6	5" x .0135 x 15'-2	ST303
	C	3	9" x .0135" x 13'-2 1/2	ST303
	D	3	5" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2 x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2 x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 1/8" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1 1/2" x 1 1/4" x	BT212
			.230 x 6'-6 1/2"	CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400

NO.	DATE	REVISION	
⚠1	6-9-69	AS NOTED	0.0
NO.	DATE	REVISION	81

⚠1
AB4 1 — 10-15-68
AB4 15,16 & 39 — 7-22-68
AB4 41 — 7-22-68
A-12 4 — 1-6-69
AB3 — [illegible]
AB1 7 — 7-22-68
AB2 8 & 7 — 7-22-68
AB4 42 — 10-15-68

THE PORT OF NEW YORK AUTHORITY

[illegible] FLOORS 81-82 (N)

PANEL GRID [illegible] x 59'-5"

BLDG. B FLOORS 81-82 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3 B

APPROVED FOR FABRICATION BY James White N.K.A. — DATE 1/2/70

DRAWN BY [illegible] DATE OCT 23, 1968

APPROVED FOR FABRICATION BY [illegible] — DATE [illegible]

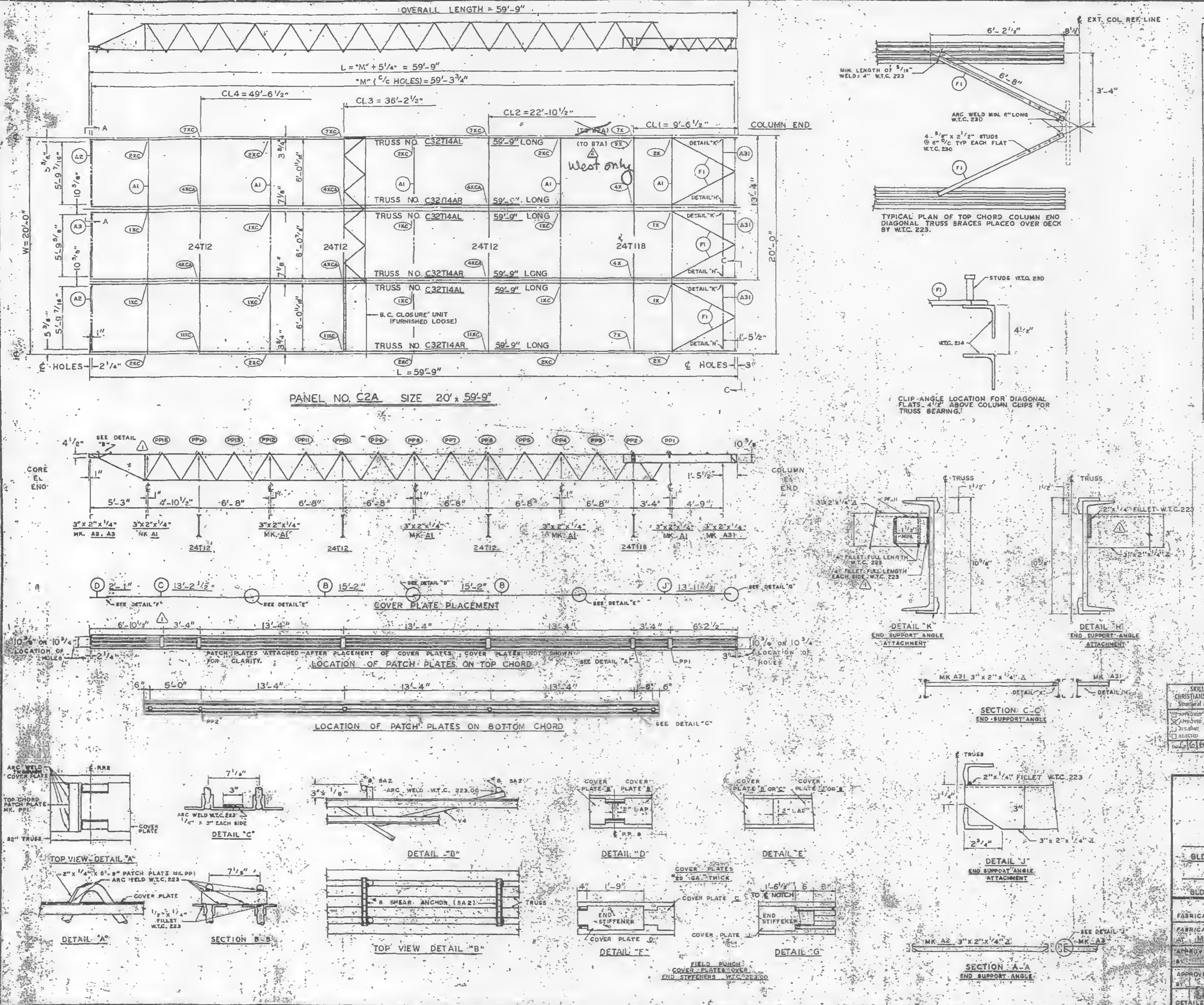
CHECKED BY T.M. CHURA DATE OCT 23, 1968

IN CHARGE OF PROD. DEV.

DETAILED BY A.C. WEBER

FABRICATION CONT. NO. [illegible] 221

SHEET ED GRID


OVERALL LENGTH = 59'-9"
L = "M" + 5 1/4" = 59'-9"
"M" (C/C HOLES) = 59'-3 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14AL 59'-9" LONG
TRUSS NO. C32T14AR 59'-9" LONG
West only
24T12
24T118
B.C. CLOSURE UNIT (FURNISHED LOOSE)
DETAIL "K"
DETAIL "H"
W = 20'-0"
L = 59'-9"
℄ HOLES
PANEL NO. C2A SIZE 20' x 59'-9"
CORE ℄ END
COLUMN END
COVER PLATE PLACEMENT
SEE DETAIL "F"
SEE DETAIL "E"
SEE DETAIL "D"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "A"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
EXT. COL. REF. LINE
MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223
ARC WELD MIN. 6" LONG W.T.C. 230
4 - 5/8" x 2 1/2" STUDS @ 6" O/C TYP EACH FLAT W.T.C. 230
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW-DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	3	C32T14AL x 59'-9"	ST 214AL
	T14AR	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T118	1	24T118 x 19'-11"	BT 2118
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" □ 6'-6 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x 1 1/2"x .25"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY
2	5-12-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 6/6/69 by SK

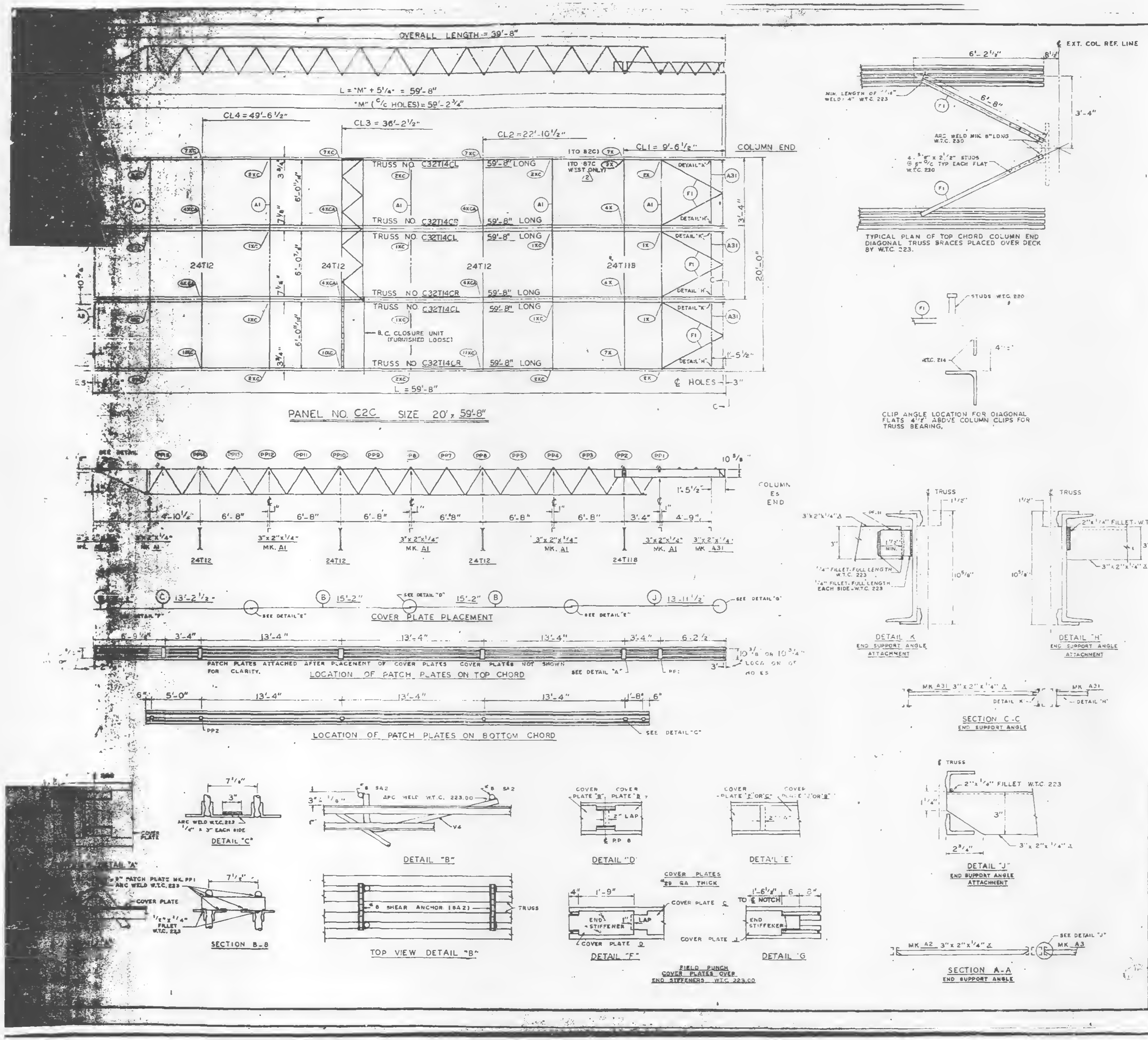
REF. DRWG.

7-AB3-28	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

FLOOR - PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH) 1
PANEL C2A - 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-28
PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE
DRAWN BY
DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.N. CHUKA
DATE DEC. 5, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP C2A



PANEL NO. C2C SIZE 20' x 59'-8"

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL K
END SUPPORT ANGLE ATTACHMENT

DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

DETAIL "C"

DETAIL "B"

DETAIL "D"

DETAIL "E"

SECTION B-B

TOP VIEW DETAIL "B"

DETAIL "F"

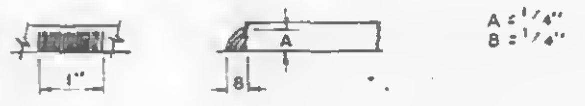
DETAIL "G"

COVER PLATES #29 GA THICK

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T118	1	24T118 x 19'-11"	ST 218
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	8C	3	1¼" D 6'-6½" TUBE	ST 212
3"x2"x¼" ANGLE	A1	5	3"x2"x¼"x 19'-11"	ST 403
	A2	2	3"x2"x¼"x5'-11⁹⁄₁₆"	ST 403
	A3	1	3"x2"x¼"x5'-11¾"	ST 403
	A31	3	3"x2"x¼"x5'-8⅛"	ST 410
CLOSURE PLATES	PF-11	3	3" x ¼" x 0'-2⅜"	ST 412
DIAGONAL FLATS	F1	8	1½" x ⅝" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2½"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11½"	ST 304
ANGLE CLIPS	C1	21	2"x1½"x .25"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400
	P9	6	3" x ½" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FULL THROAT FILLET.



NO.	DATE	REVISION	BY
2	6-13-69	AS NOTED	G.D.C.
1	5-12-69	AS NOTED	G.D.C.

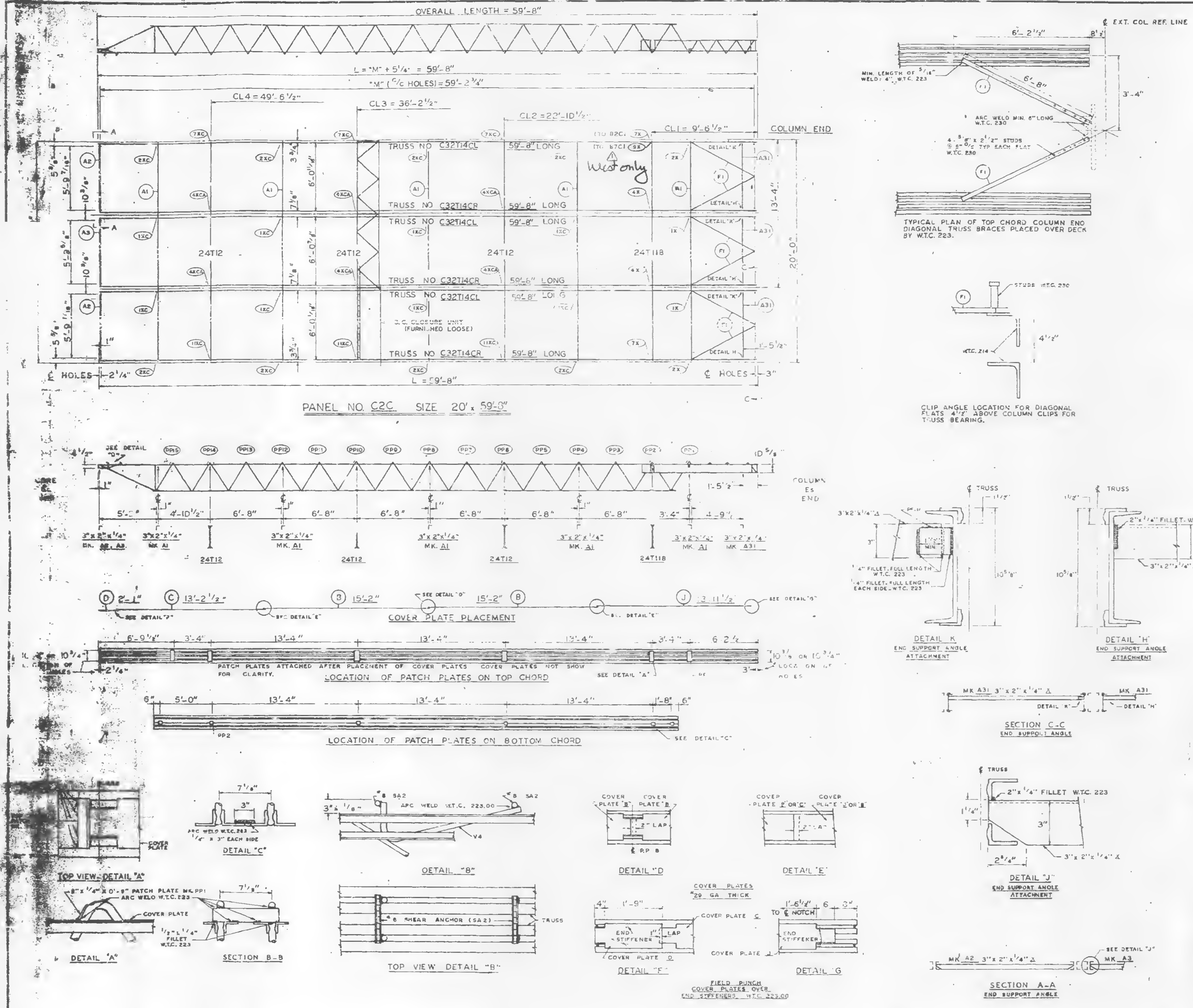
REF. DRWG.		
	7-A83-28	10-4-66
	7-A84-28	7-22-66
	7-A91-13	10-4-66
	7-A82-7	7-22-66
	7-A82-15	10-4-66

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)
PANEL C2C - 20' x 59'-8"
BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-28	PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O. N.Y.A.	DATE 7/28/69	DRAWN BY LucR DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR [illegible]	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEPT.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP C2C



REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T118	1	24T118 x 19'-11"	BT 2118
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" O 6'-6 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	3"x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .035" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x 1 1/2"x .25"x 0'-6"	ST 400
SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-6"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie.. (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY
1	5-12-69	AS NOTED	G.D.C

SKILLING - HELLE
CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ REJECTED
☐ REVISED
6/6/69 SK

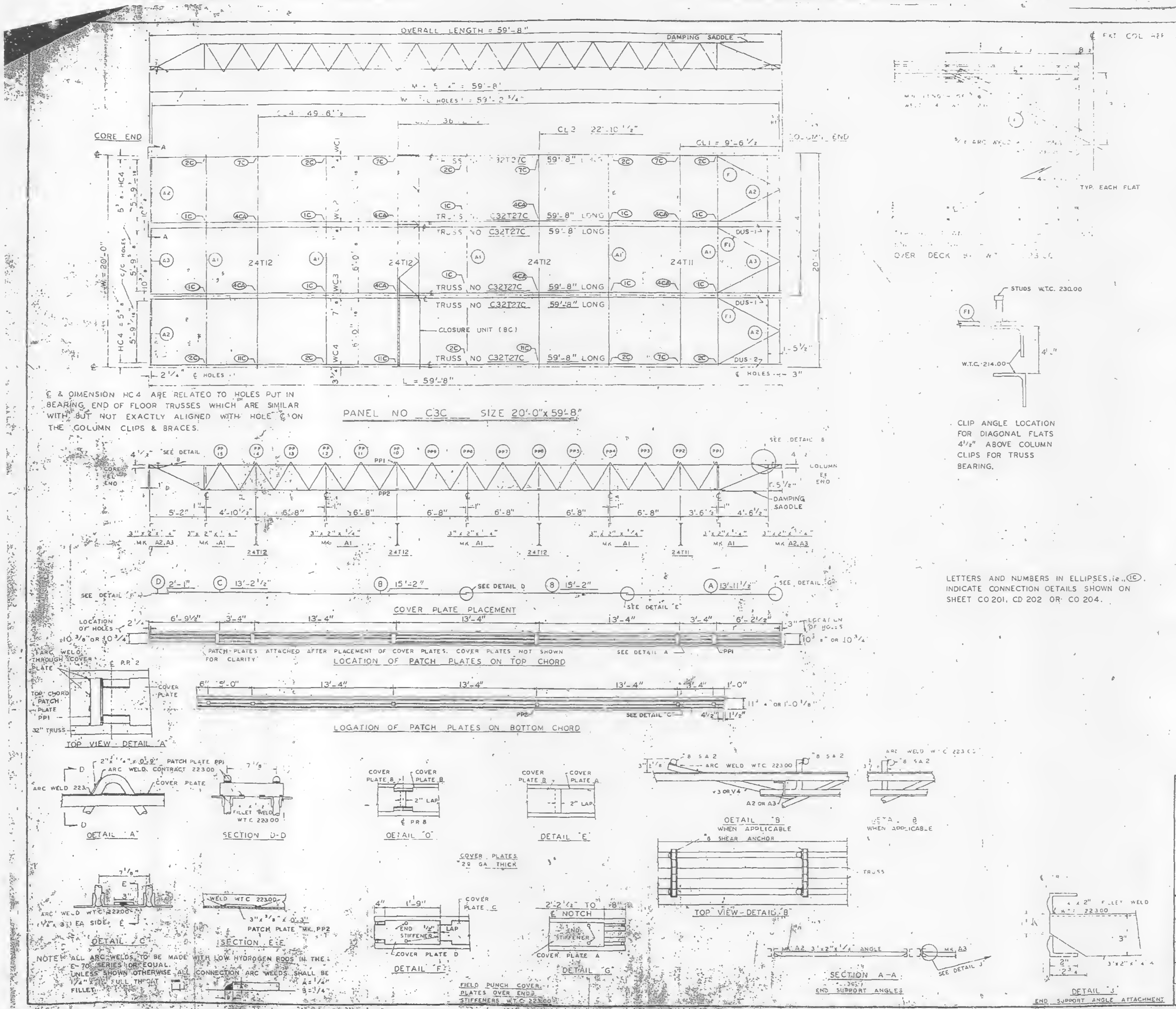
REF DRWG.

7-A83-28	10-4-68
7-A84-28	7-22-68
7-A81-13	10-4-68
7-A82-7	7-22-68
7-A82-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)
PANEL C2C - 20' x 59'-8"
BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-28
PLATE
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A
DATE
DRAWN BY Luch
DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY ______ FABRICATOR
DATE
CHECKED BY T.N. CHURA
DATE APRIL 28, 1969
IN CHARGE OF PROD. DIV.
DETAILED BY
FABRICATION CONT NO W.T.C. 221
SHEET NO FP C2C



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET. A = 1/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	27C	6	C32T27C 59'-8"	ST227C
[illegible]	[illegible]	1	24' 9'-1"	BT211
	T12	3	24T12 - 9'-11"	BT212
ANGLE	A1	5	3"x2"x1/4"x19'-11"	ST 403
	A2	4	3"x2"x1/4"x5'-11 9/16	ST 403
	A3	2	3"x2"x1/4"x5'-11 3/4"	ST 403
[illegible]	F		[illegible] x 5' 8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	[illegible]	ST303
	B	6	9" x .0135" x 15'-2"	ST303
	C	3	9" x .0135" x 13'-2 1/2"	ST303
	D	3	9" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0-6	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" # x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1 1/2" x 1 1/4" x	BT212
			.230 x 6'-6 1/2"	CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

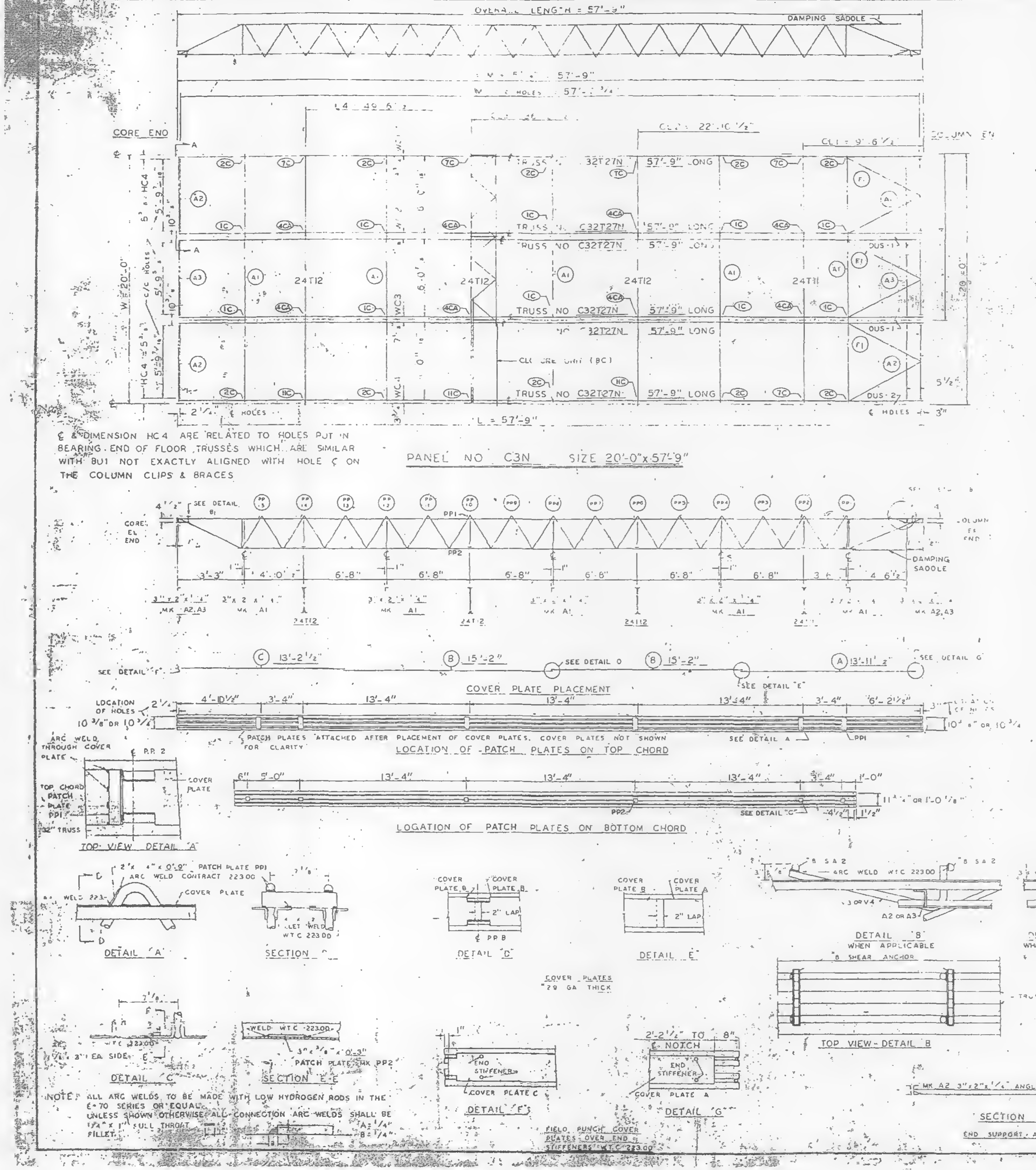
NO.	DATE	REVISION	BY

REF DRWG	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA-12 4	1-6-69
7-AB3-45	1-6-69
7-AB1-24	1-6-69
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOOR 78 (SOUTH)
PANEL C3C - 20'-0" x 59'-8"
BLDG. B FLOORS 78 (EAST)

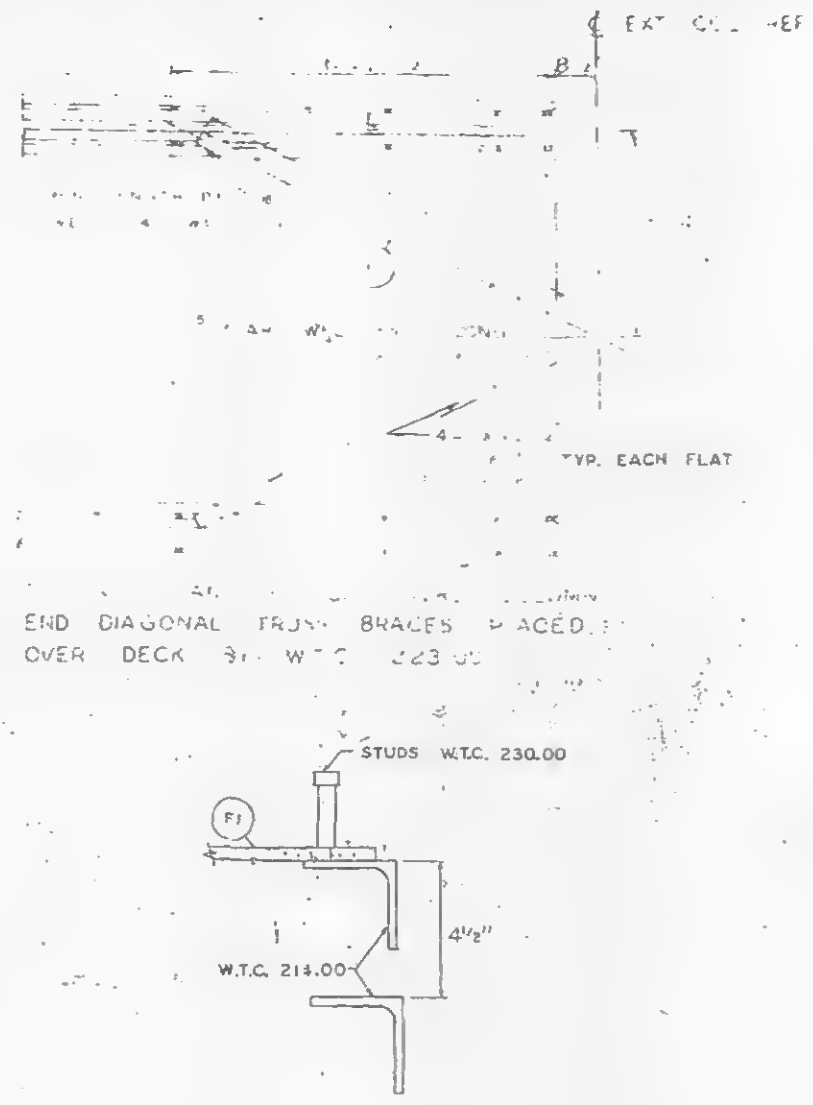
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-45 PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 7/31/69
DRAWN BY
DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA
DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP C3C



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BU1 NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
	27N	6	T27N 57'-9"	ST227N
				T211
	T12	3	24T12	BT212
	A1	3	3 x 2 x 1/4 x 19'-11"	ST 403
	A2		3 x 2 x 1/4 x 5'-11 9/16	ST 403
	A3	2	3 x 2 x 1/4 x 5'-11 3/4	ST 403
	F1			ST 402
PATCH PLATES	PP1	18		ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0135" x 13'-11 1/2"	ST303
	B	6	9" x 0135" x 15'-2"	ST303
	C	3	9" x 0135" x 13'-2 1/2"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	3	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS 2	1	3 1/2 x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 x 1 1/2" x 1 1/4" x .230 x 6'-6 1/2"	BT212 CO204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

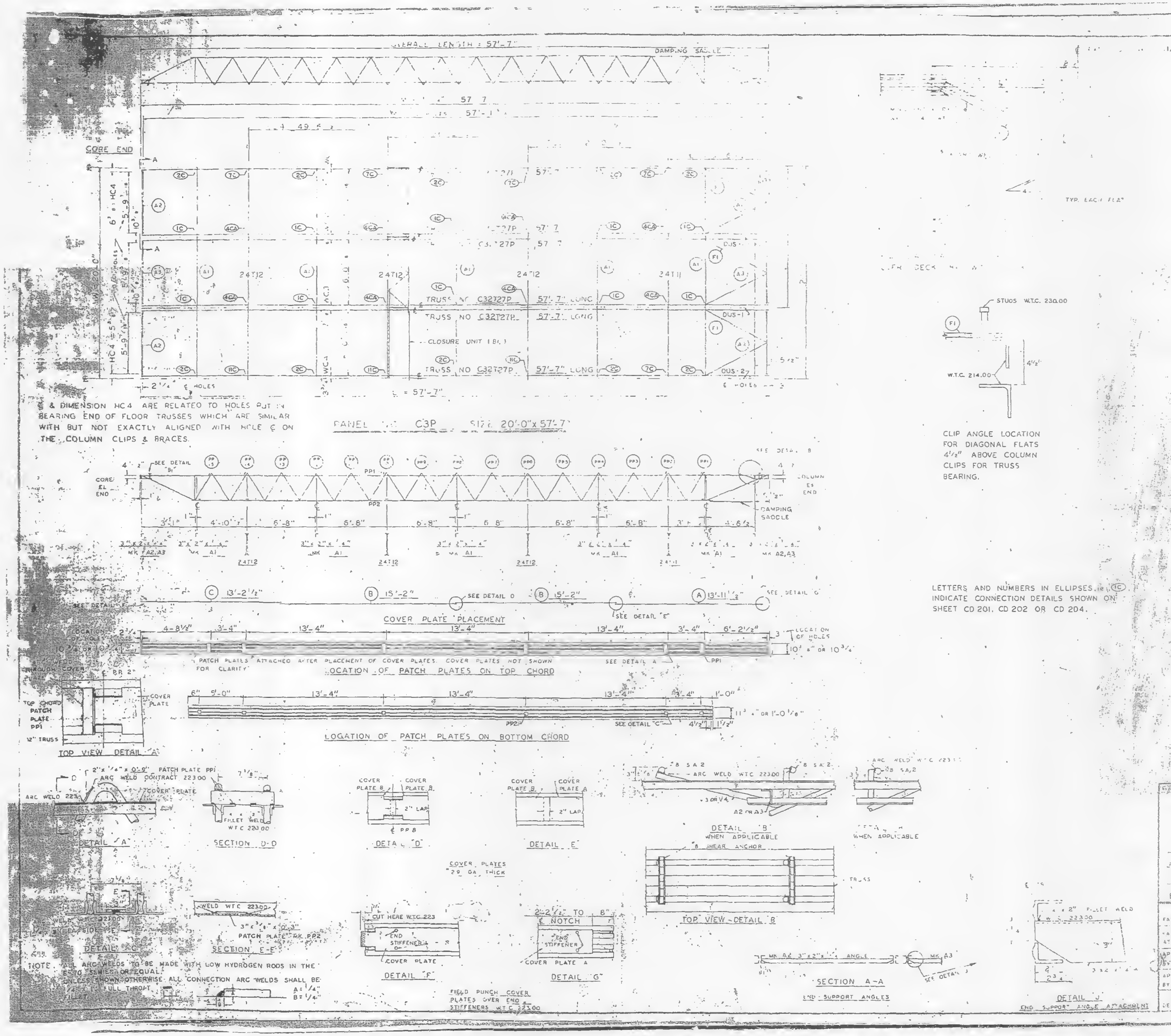
REF DRWG	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA 124	1-6-69
7-AB3-45	1-6-69
7-AB1-24	1-6-69
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B 44 (EAST)

PANEL C3N - 20'-0" x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-45 PLATE
APPROVED FOR FABRICATION BY FOR PONYA DATE 7/31/69
DRAWN BY DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP C3N


OVERALL LENGTH = 57'-7"
DAMPING SADDLE
CORE END
TRUSS NO C32T27P 57'-7" LONG
CLOSURE UNIT (BC)
PANEL NO. C3P SIZE 20'-0" x 57'-7"
SEE DETAIL "B"
CORE EL END
COLUMN ES END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION D-D
DETAIL "D"
DETAIL "E"
DETAIL "B" WHEN APPLICABLE
TOP VIEW - DETAIL "B"
DETAIL "C"
SECTION E-E
DETAIL "F"
DETAIL "G"
SECTION A-A END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x 1" FULL THROAT FILLET.
A = ¼"
B = ¼"

[illegible]	MATERIAL PER PANEL			REF. DRWG.
	MK	NO. PCS	SIZE	
	27P	[illegible]	C32T27P 57'-7"	ST227P
				BT2.1
				BT2.2
				ST 403
				ST 403
				ST 403
				ST 402
PATCH [illegible]	PP	[illegible]		ST 400
				ST 400
[illegible]		21	[illegible]	ST 400
[illegible]	SA2	9	#3 REBAR x 0'-9"	ST 400
[illegible]	[illegible]	2	[illegible] 6⅞"	[illegible]
	[illegible]	1	[illegible] 6⅞"	ST 29P
[illegible]	CB1	4	[illegible] 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4x1 2" x 1¼" x	BT 212
			.230 x 6'-6½"	CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

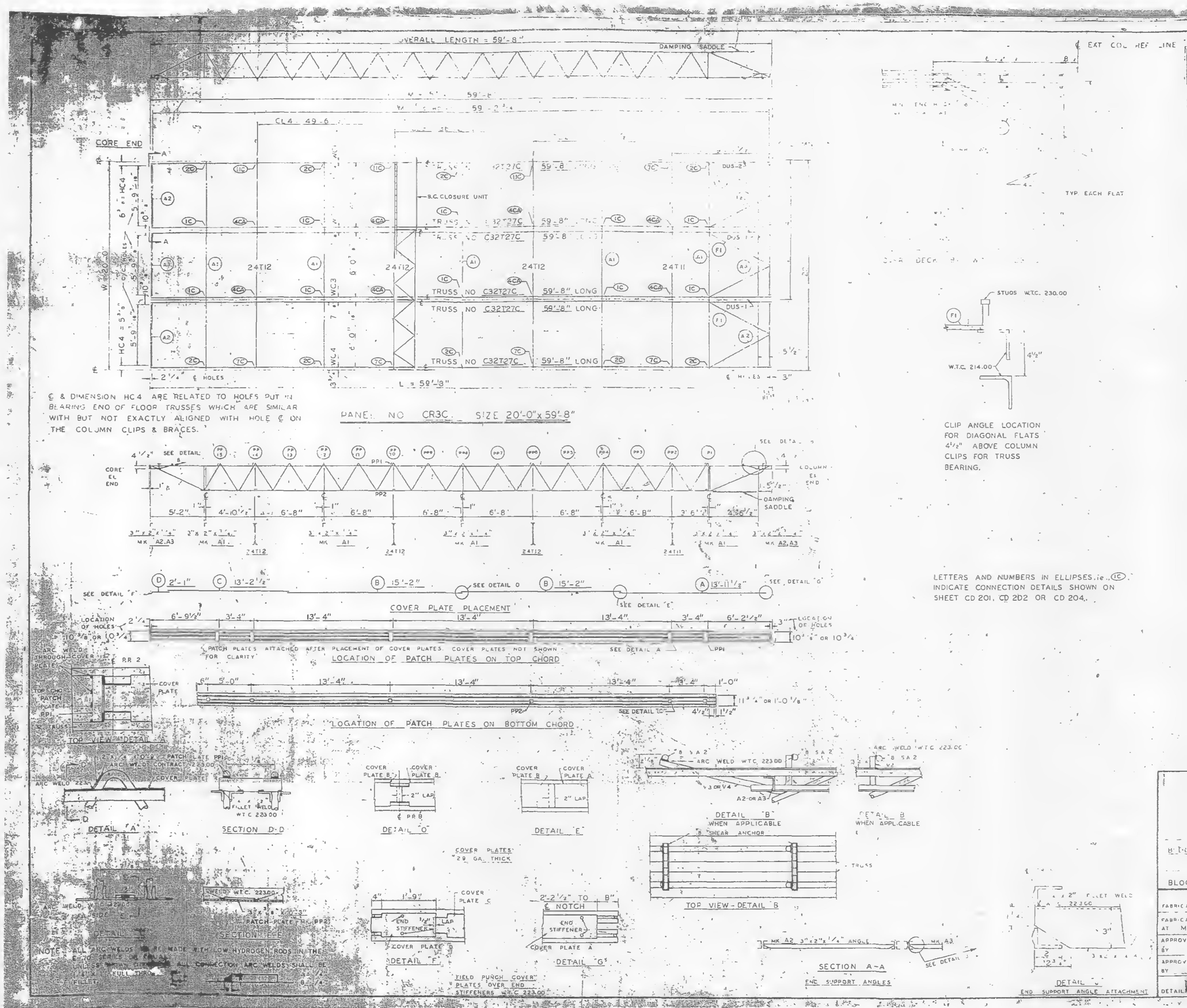
REF. DRWG.

7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA 12.4	1-6-69
7-AB3-45	1-6-69
7-AB1-24	1-6-69
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
[illegible] N.Y.C.
FOR
[illegible] NEW YORK AUTHORITY
BLDG. A 78 (NORTH)
PANEL C3P - 20'-0" x 57'-7"
BLDG. B FLOORS 78 (WEST)

FABRICATION BY [illegible] STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 7/31/69	DESIGN DRAWING NO 7-AB3-45	PLATE
		DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEPT.
DETAILED BY A.E. WEBER		FABRICATION CONT. NO. 221	SHEET NO. FP C3P



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO CR3C SIZE 20'-0" x 59'-8"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. ⓘⒸ INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS [illegible] ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THRO [illegible] FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
[illegible]	27C	6	32T27C- 59'-8"	ST27C
[illegible]	[illegible]	1	24T[illegible]	BT211
	T2	3	24T12- 19'-11"	BT 212
[illegible] ANGLE	A1	5	[illegible]	ST 403
	A2	4	[illegible]	ST 403
	[illegible]	[illegible]	[illegible]	ST 403
[illegible]	F1	[illegible]	[illegible] 8"	ST 402
PATCH PLATES	PP1	18	[illegible] 9	ST 400
	PP2	18	[illegible] 3"	ST 400
COVER PLATES	A	3	[illegible]	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2½"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2" x 1½" x ¼" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3½" x 3½" x ⅜" x 3'-6⅞"	ST 298
	DUS 2	1	3½" x 3½" x ⅜ x 3'-6⅞"	ST 298
CONNECTION BAR	CB1	4	1 ⅝ x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1½" x 1¼" x	BT212
			.230 x 6'-6½"	CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

REF DRWG		
	7-AB4-3	10-15-68
	7-AB4-15 & 16	7-22-68
	7-AB4-41	7-22-68
	SA-124	1-6-69
	7-AB3-46	1-6-69
	7-AB1-24	1-6-69
	7-AB2-6 & 7	7-22-68
	7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

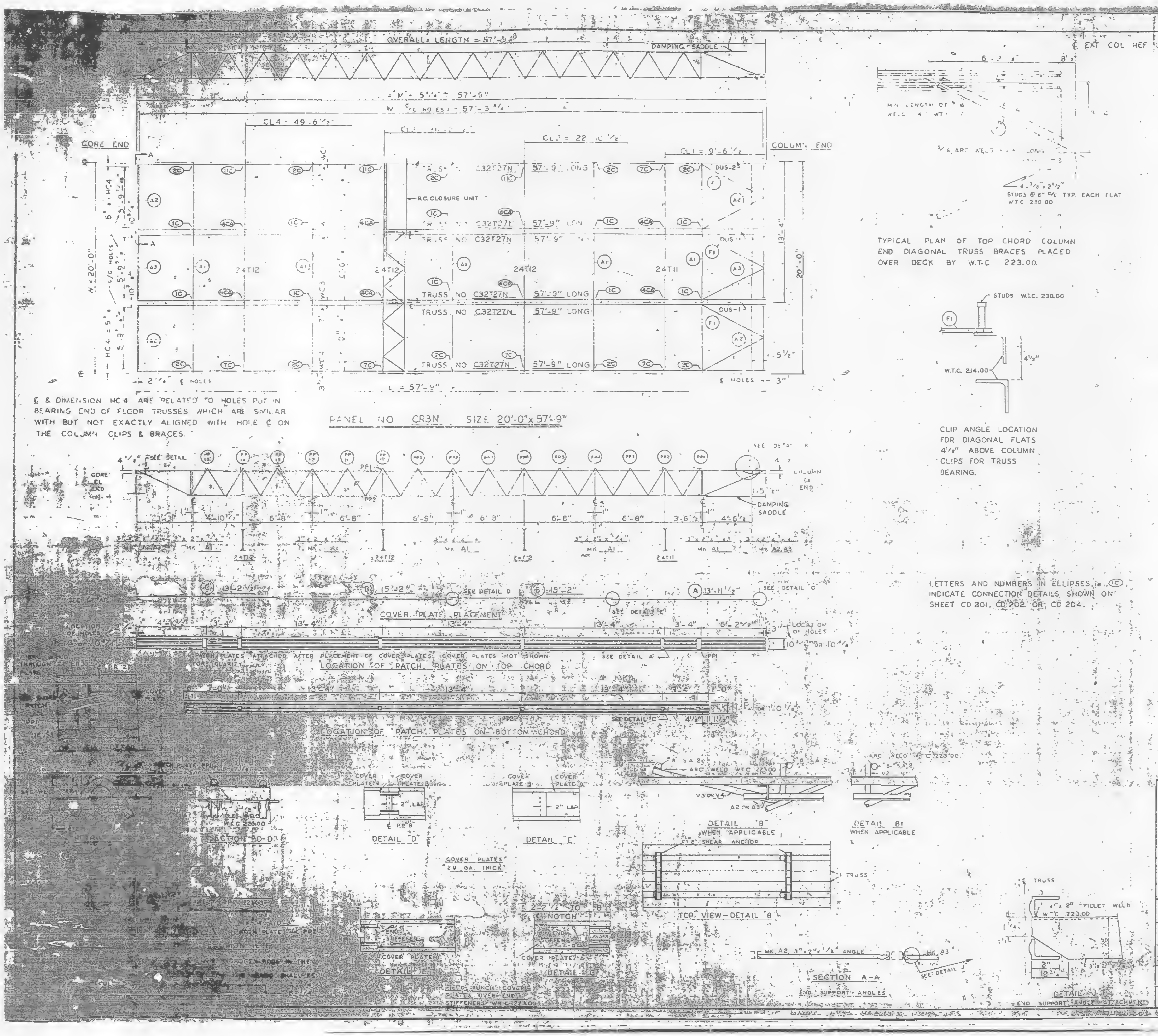
BLDG. A FLOORS 78 (SOUTH)

PANEL CR3C - 20'-0" x 59'-8"

BLDG. B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-46	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A	DATE 7/31/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY R.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-CR3C



€ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T27N	6	C32T27N 57'-9"	ST27N
BRIDGING TRUSSES	[illegible]		24T [illegible]	BT [illegible]
	T2	3	24T 2 [illegible] 11"	BT 212
[illegible] ANGLE	A1	5	3 x 2 x [illegible]	ST 403
	A2	4	3 x 2 [illegible]	ST 403
	A3	2	[illegible]	ST 403
[illegible]	F	[illegible]	[illegible] x 5-6	ST 402
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	16	[illegible]	ST 400
COVER PLATES	A	3	9 x 0.35 x 3-11 1/2	ST303
	B	6	9 x 0.35 x 15'-2"	ST303
	C	3	9 x 0.35 x 3-2 1/2	ST303
ANGLE CLIP	C1	21	2 x 1 1/2 x 1/4 x 0'-6	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2 x 3 1/2 x 3/8" x 3-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 3/8 x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 1 1/2" x 1 1/4" x .230 x 6'-6 1/2"	BT212 CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

REF. DRWG	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA-124	1-6-69
7-AB3-46	1-6-69
7-AB1-24	1-6-69
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

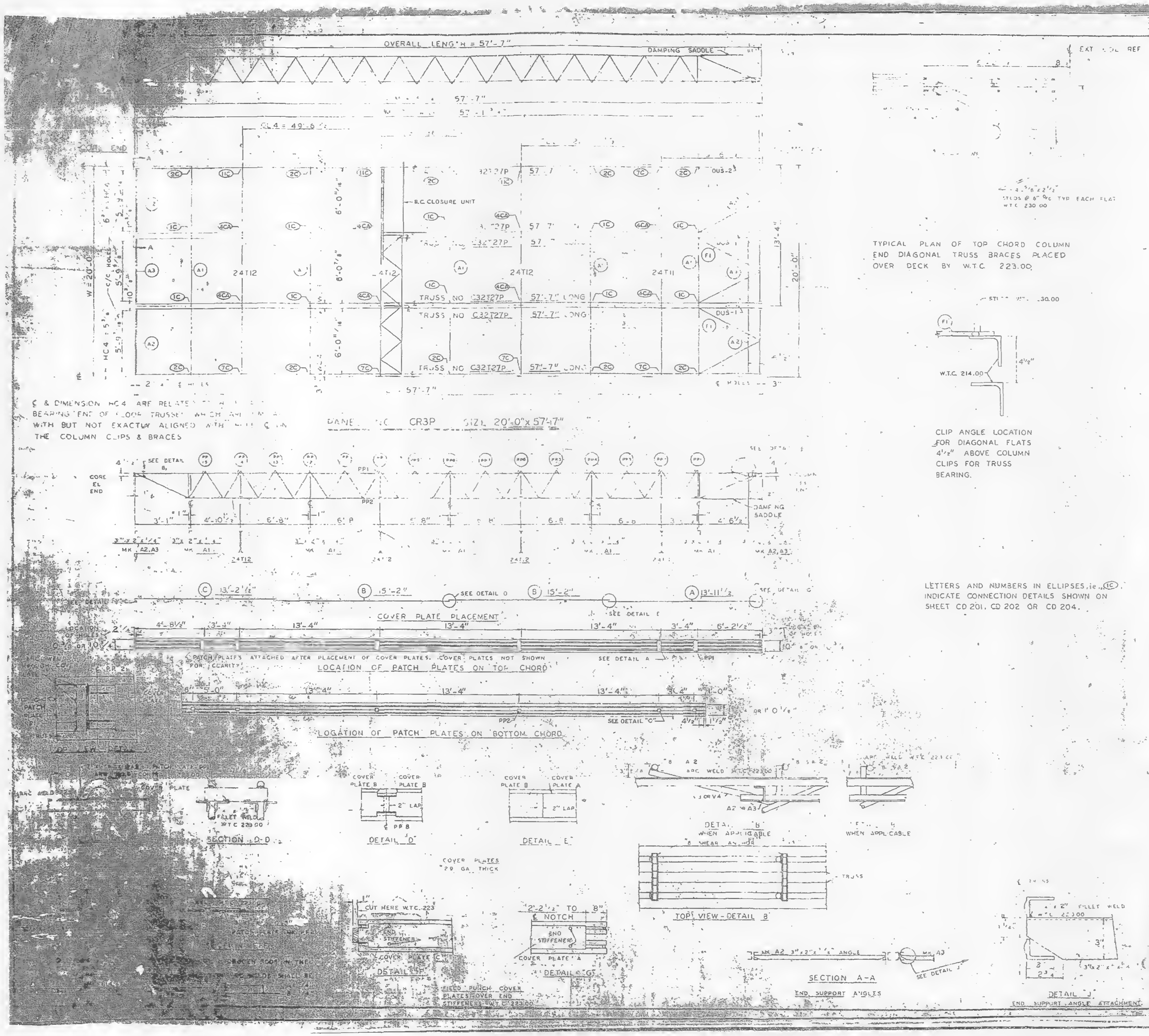
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG B FLOORS 44 (EAST)

PANEL CR3N - 20'-0" x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-46	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 7/3/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]	LACLEDE STEEL CO	FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP CR3N



PANEL NO CR3P SIZE 20'-0" x 57'-7"

℄ & DIMENSION HC4 ARE RELATED TO THE BEARING END OF FLOOR TRUSSES WHICH ARE ... WITH BUT NOT EXACTLY ALIGNED WITH ... ℄ ... THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. ⓘC INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
	27P	[illegible]	32T27P 57'-7"	ST227P
				BT212
			24"	BT212
		8		ST 403
				ST 403
				ST 403
				ST 402
	FF	8		ST 400
	PP	8		ST 400
		3		ST 303
		6		ST 303
				ST 303
		21		ST 400
	SA2	9	REBAR x 0'-9"	ST 400
	DUS	2	3 1/2" x 3 1/2" x 3/8" x 3-6 7/8"	ST298
	DUS 2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CBI	4	1 3/4" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4" x 1 1/2 x 1 1/4" x	BT212
			230 x 6'-6 1/2"	CO204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

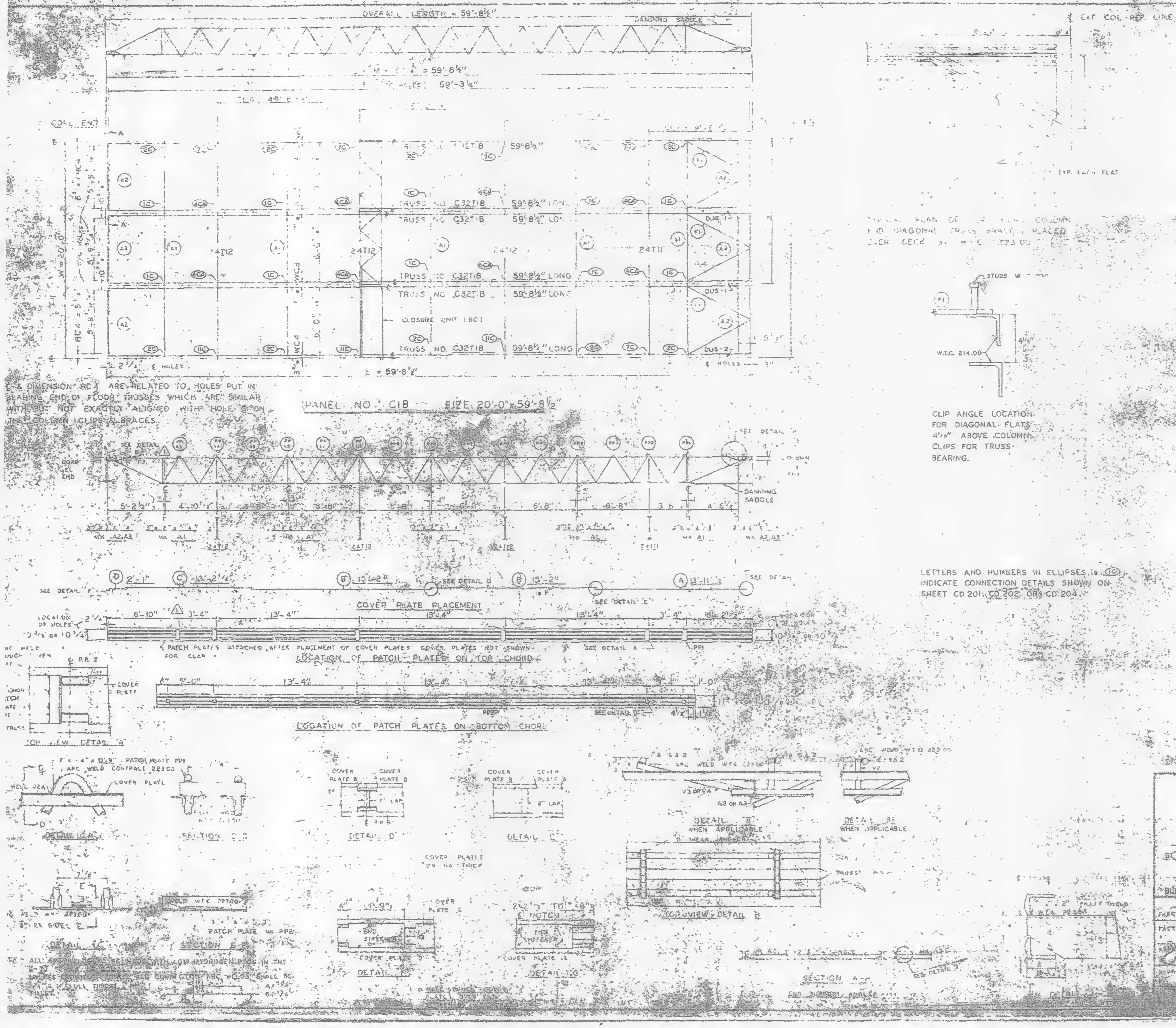
REF DRWG		
	7-AB4-3	10-15-68
	7-AB4-15 & 16	7-22-68
	7-AB4-41	7-22-68
	SA-124	1-6-69
	7-AB3-46	1-6-69
	7-AB1-24	1-6-69
	7-AB2-6 & 7	7-22-68
	7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOOR 78 (NORTH)
PANEL CR3P 20'-0" x 57'-7"
BLDG. B FLOORS 78 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-46	
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A	DATE 7/3/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 28, 1969	IN CHARGE PROD. DEV.
DETAILED BY [illegible] WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP CR3P



E & DIMENSION "RC" ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE "E" ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES (Ie. ①C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

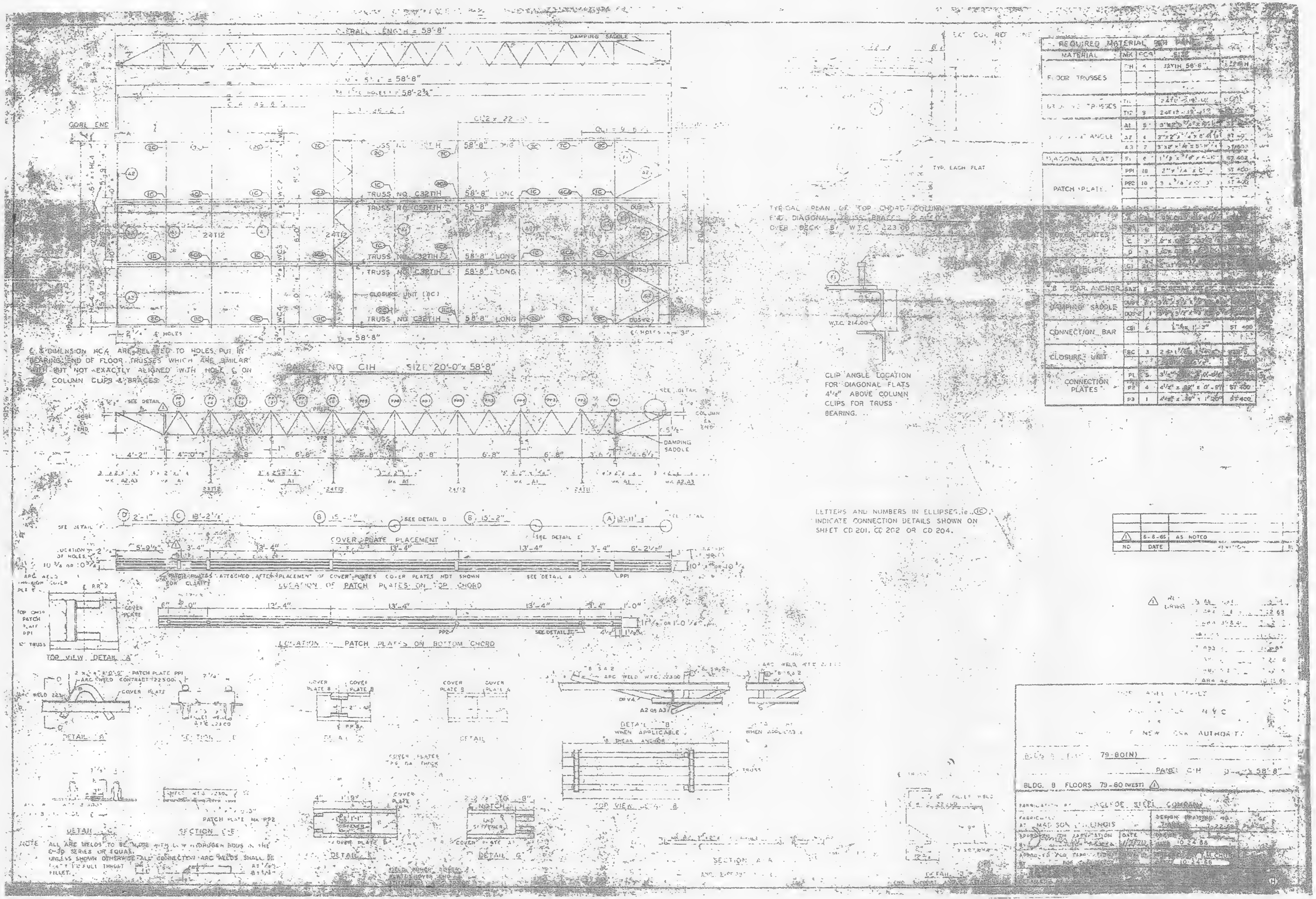
REQUIRED MATERIAL				
MATERIAL	MK.		SIZE	
FLOOR TRUSSES	C18		[illegible] 59'-8½"	ST 2[illegible]
BRIDGING TRUSSES	T11	1	24T11 [illegible]	ST 2[illegible]
	T12	3	24T12 [illegible]	[illegible]
ANGLE	A1	9	[illegible]	[illegible]
	A2	4	3"x2"x¼"x5'-11¼"	ST 403
		2	3"x2"x¼"x5'-11"	ST 407
			1½"x [illegible] x 2'-8"	ST 402
PATCH PLATES	PP1	18	2"x [illegible] x 0'-9"	ST 400
	PP2	16	3"x [illegible] x 0'-3"	ST 400
COVER PLATES	A	3	9"x 0.135" x 13'-[illegible]	[illegible]
	B	6	9"x 0.135" x [illegible]	[illegible]
	C	3	9"x 0.135" x 13'-2	ST 302
	D	3	9"x 0.135" x 2'-1"	[illegible]
ANGLE CLIPS	C1	21	2"x2½"x¼"x0'-6	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR [illegible]	[illegible]
DAMPING SADDLE	DUS-1	2	3½"x3½"x [illegible]	[illegible]
	DUS-2	1	3½"x3½"x [illegible]	[illegible]
CONNECTION BAR	CB1	4	1"Ø x 1'-3"	ST 400
CLOSURE UNIT	BC	8	[illegible]	[illegible]
			[illegible]	[illegible]
CONNECTION PLATES	P1	5	[illegible]	[illegible]
	P2	4	[illegible]	ST 400
	P3	1	[illegible] x 1'-0"	ST 4[illegible]

NO.	DATE	REVISION
1	8-5-69	AS NOTED

1 REF DRWG.
SA-[illegible] 5-[illegible]
7-A[illegible] 8-[illegible]
7-A[illegible] [illegible]
7-A82-[illegible] 7-22-[illegible]
7-A[illegible] 10-15-68

FLOOR PANEL DETAILS
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83-91, 93-106 (N)
BLDG. B FLOORS 83-91, 93-106 [illegible]
FABRICATION BY LACLEDE STEEL
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION 10-24-68
APPROVED FOR FABRICATION [illegible] M. CHUR 10-24-68



C & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES

PANEL NO C1H SIZE 20'-0" x 58'-8"

TYPICAL PLAN OF TOP CHORD COLUMN END, DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE MADE TO FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1H	4	32T1H 58'-8"	[illegible]
BRIDGING TRUSSES	T11		24T11 - 19'-1 3/4"	[illegible]
	T12	9	24T12 - 19'-1 3/4"	[illegible]
ANGLE	A1	5	[illegible]	[illegible]
	A2	4	[illegible]	ST 400
	A3	2	[illegible]	ST 403
DIAGONAL FLATS	F1	6	[illegible]	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-	ST 400
	PP2	18	[illegible]	ST 400
COVER PLATES	A	[illegible]	[illegible]	[illegible]
	B	6	[illegible]	[illegible]
	C	3	[illegible]	[illegible]
	D	3	[illegible]	[illegible]
ANGLE CLIPS	C1	[illegible]	[illegible]	[illegible]
SHEAR ANCHOR	SA2	9	[illegible]	[illegible]
DAMPING SADDLE	DUS-1	[illegible]	[illegible]	[illegible]
	DUS-2	1	[illegible]	[illegible]
CONNECTION BAR	CB1	4	[illegible] 1'-3"	ST 400
CLOSURE UNIT	8C	3	[illegible]	[illegible]
CONNECTION PLATES	P1	5	[illegible]	[illegible]
	P2	4	4 1/2" x .38" x 0'-5"	ST 400
	P3	1	4 1/2" x .38" x 1'-20"	ST 400

1	6-8-65	AS NOTED
NO.	DATE	REVISION

NEW YORK AUTHORITY

BLDG B FLOORS 79-80(N)

PANEL C1H 20'-0" x 58'-8"

BLDG. B FLOORS 79-80 (WEST) 1

FABRICATED BY [illegible] STEEL COMPANY

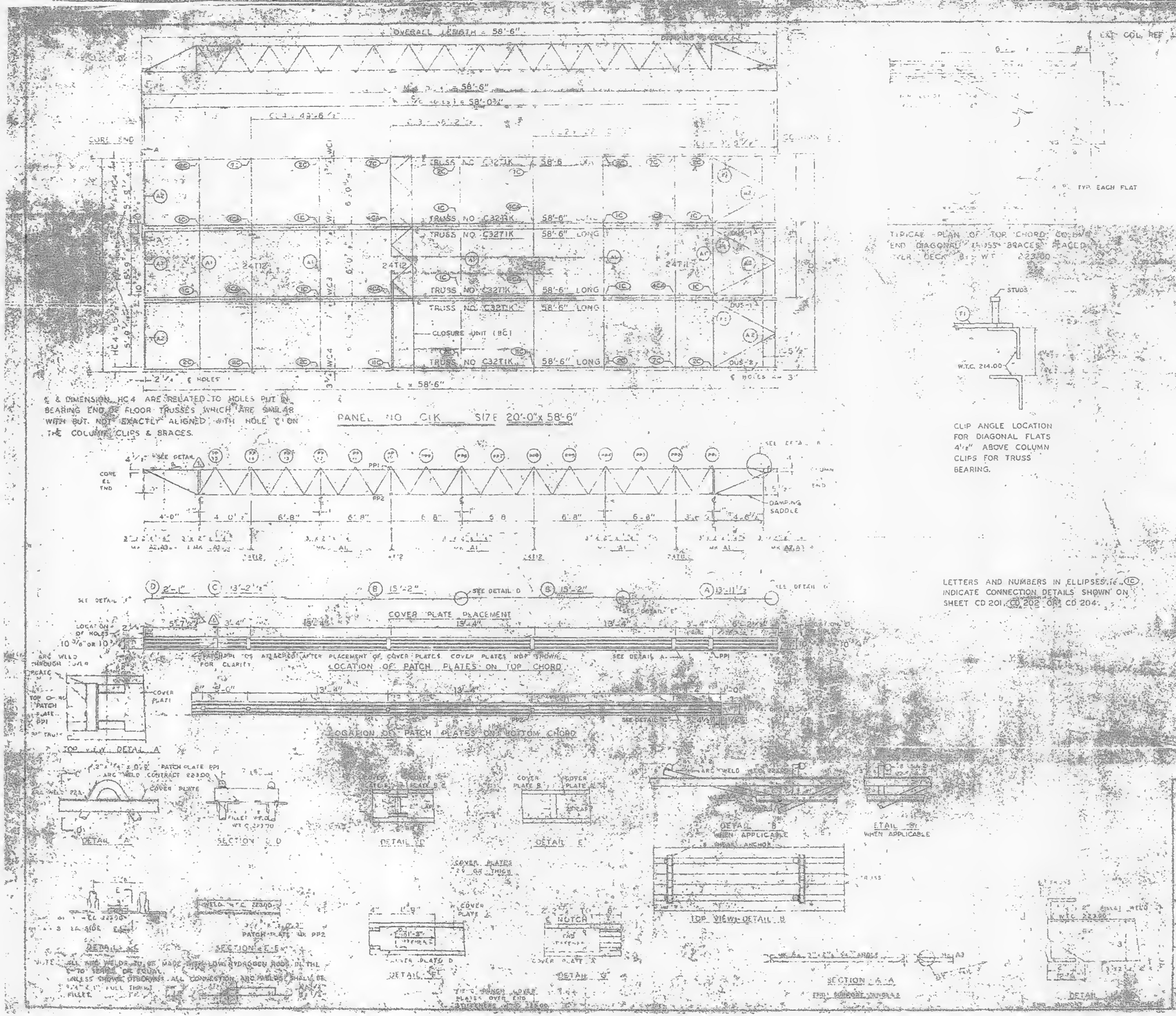
FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-22-68

10-24-66

T.M. CHUR

10-24-66



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x 1" FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	[illegible]
FLOOR TRUSSES	T1K	6	C32T1K 58'-6"	[illegible]
BRIDGING TRUSSES	T11	1	24T11 [illegible]	ST2 [illegible]
	T12	3	24T12 - 19'-11"	ST 2[illegible]
3"x2"x¼" ANGLE	A1	[illegible]	3"x2"x¼"x [illegible]	ST 4[illegible]
	A2	4	3"x2"x¼"x 5'-[illegible]	ST 403
	A[illegible]	2	3"x2"x¼"x [illegible]	ST [illegible]
DIAGONAL FLATS	F1	8	[illegible]	ST 402
PATCH PLATES	PP1	18	2"x ¼" x 0'-5"	ST 400
	PP2	18	3" x ⁵⁄₁₆" x 0'-[illegible]	ST 400
COVER PLATES	A	[illegible]	9" x .035" x 13'-11½"	ST 2[illegible]
	B	[illegible]	9" x .035" x 15'-2"	ST [illegible]
	C	3	9" x .035" x 13'-2½"	ST 403
	D	3	9" x .035" x 2'-1"	ST 403
ANGLE CLIPS	C1	21	3"x1½"x¼"x 0'-5	ST 400
#5 SHEAR ANCHOR	SA2	9	#5 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅜"x 5'-6⅞"	ST 2[illegible]
	DUS-2	1	3½"x3½"x⅜"x 5'-6⅞"	ST 2[illegible]
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4-1½"x1¼"x	ST 212
			230 x 6'-8½"	CD 334
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 403

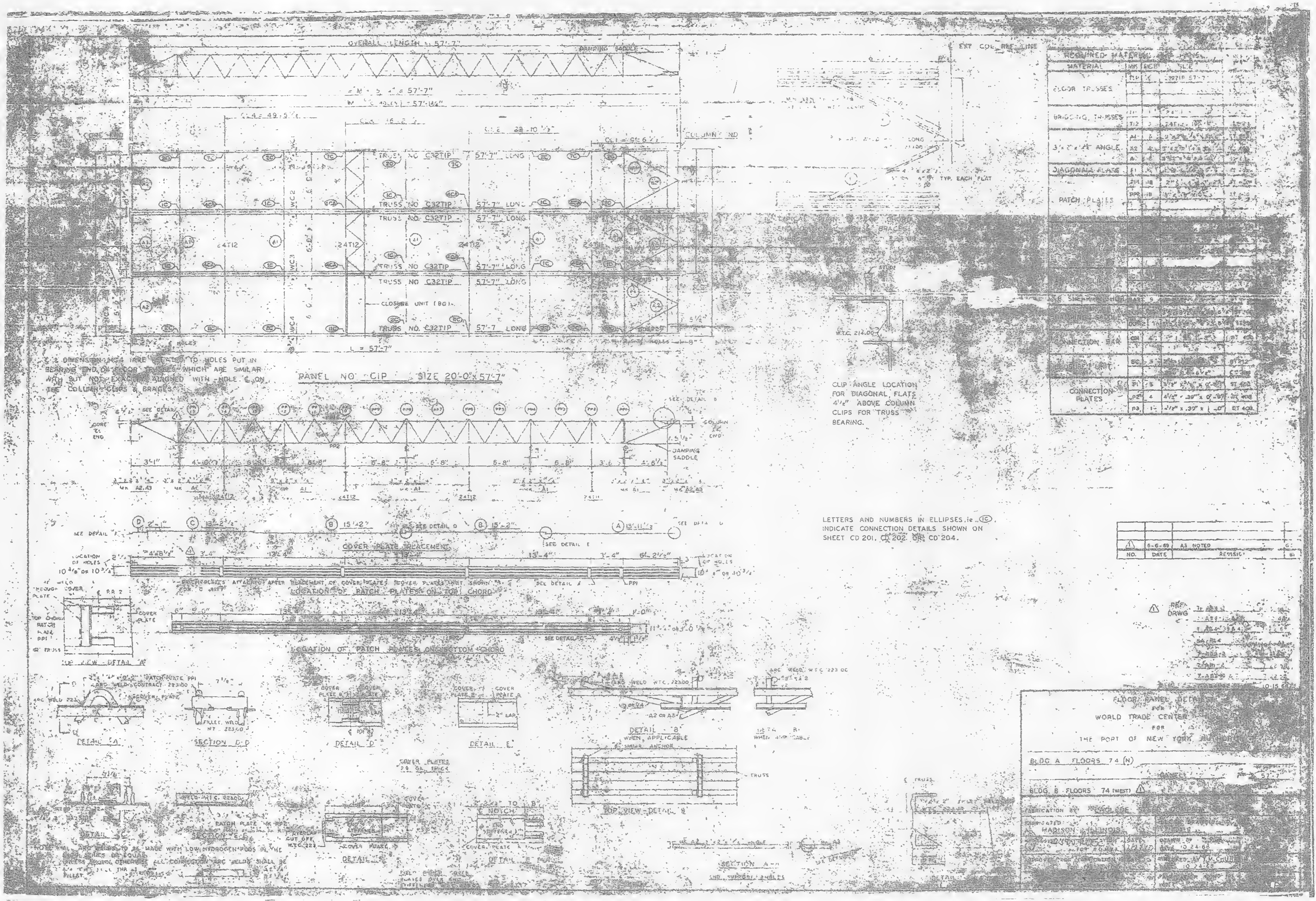
NO.	DATE	REVISION
1	6-6-69	AS NOTED

⚠1 REF. DRWG.
1-AB3-2
7-AB1-2
7-AB2-5-6
7-AB[illegible]
10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45(S), 46(N & S)
PANEL [illegible] 58'-6"
BLDG. B FLOORS 45(EAST) 46(EAST & WEST) ⚠1

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON ILLINOIS
DESIGN DRAWING NO 7-AB3-2
APPROVED FOR FABRICATION [illegible] 1/12/70
DRAWN BY [illegible] DATE 10-24-68
APPROVED FOR FABRICATION DATE
CHECKED BY T.M. CHURCH DATE 10-24-68
FABRICATION CONT. NO. [illegible]



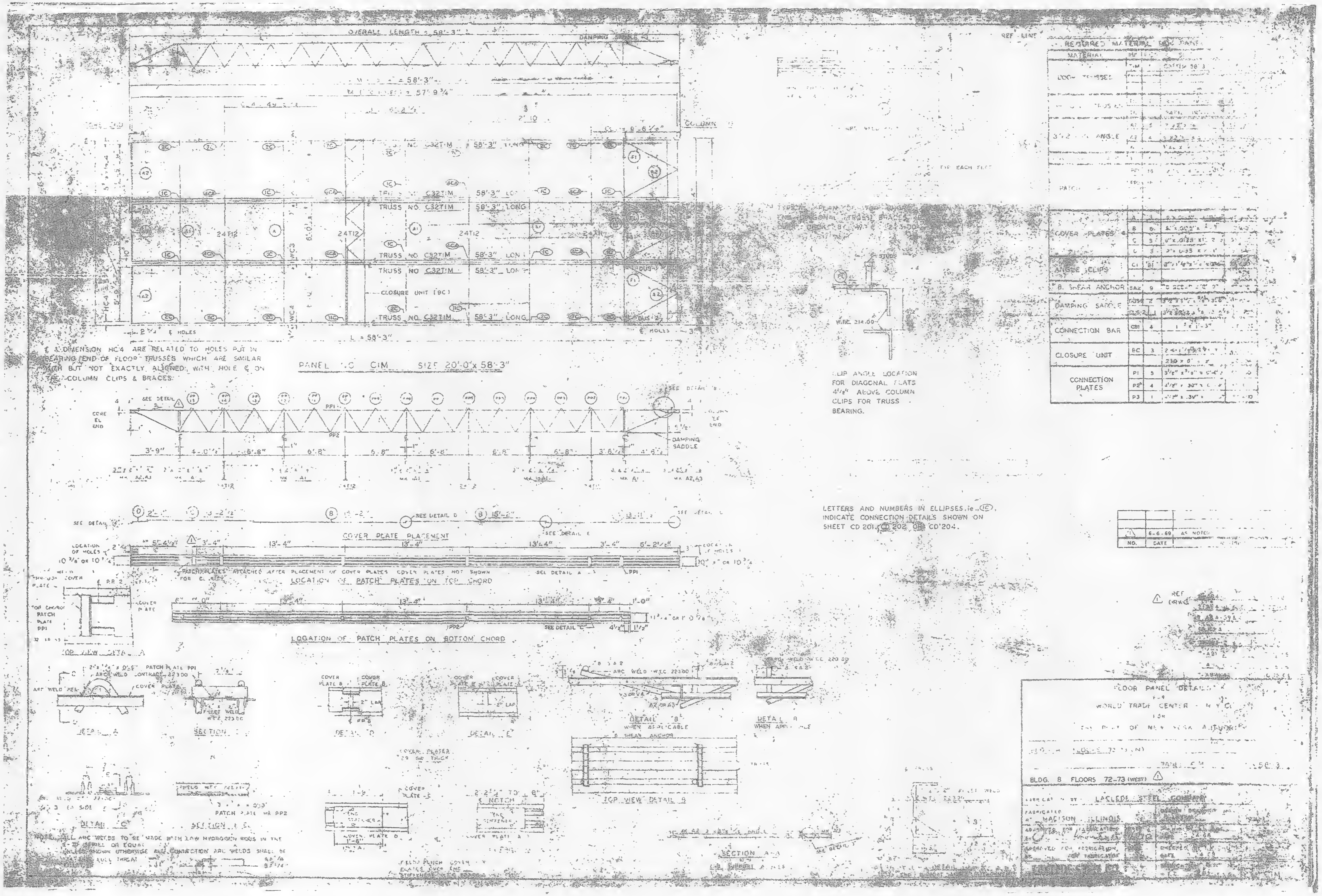
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (IC), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 74 (N)
PANEL 57'-7"
BLDG. B FLOORS 74 (WEST)

FABRICATED
MADISON, ILLINOIS
DRAWN BY
10-24-68
CHECKED BY T.M. CHUR
10-24-68



€ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ... FULL THROAT

REQUIRED MATERIAL FOR PANEL

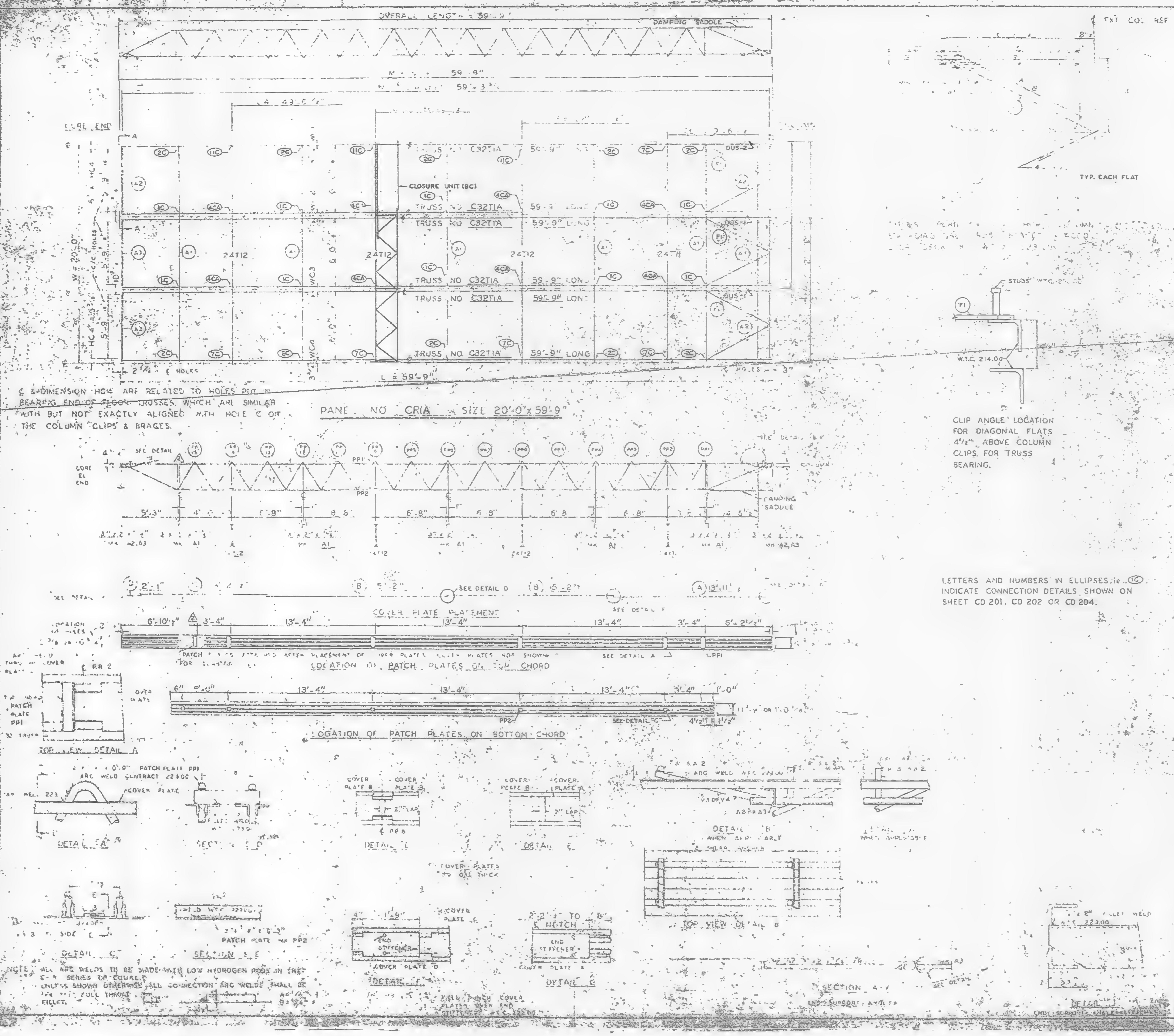
MATERIAL	MK	NO.	SIZE
FLOOR TRUSSES	T1M	[illegible]	C32T1M 58'-3
[illegible] TRUSSES	[illegible]	[illegible]	[illegible]
3 1/2 x 2 [illegible] ANGLE	A1	5	[illegible]
	A2	4	[illegible]
PATCH [illegible]	PP1	13	[illegible]
	PP2	[illegible]	[illegible]
COVER PLATES	A	3	[illegible]
	B	6	[illegible] x .033" x [illegible]
	C	3	6" x .0135" x 1'-2"
	D	3	[illegible] x .035" x [illegible]
ANGLE CLIPS	C1	21	[illegible]
B. SHEAR ANCHOR	SA2	9	[illegible]
DAMPING SADDLE	DUS1	2	[illegible]
	DUS2	1	[illegible]
CONNECTION BAR	CB1	4	[illegible]
CLOSURE UNIT	8C	3	[illegible] 230 x 8' [illegible]
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x [illegible]
	P2	4	4 1/2" x .30" x [illegible]
	P3	1	4 1/2" x .39" x [illegible]

NO.	DATE	
1	6-6-69	AS NOTED

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 8 FLOORS 72-73 (WEST)

FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION
DATE 5-24-68
CHECKED
DATE [illegible]



€ & DIMENSION HOW ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES, WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE € ON THE COLUMN CLIPS & BRACES.

PANEL NO CRIA SIZE 20'-0" x 59'-9"

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-[illegible] SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4 [illegible] FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	6	C32T1A - 59'-9	ST298
[illegible] TRUSSES	T-1	1	24T[illegible] [illegible]	BT2.1
	T-2	1	24T[illegible] [illegible]	BT2.2
[illegible] ANGLE	A1	5	3"x2"x [illegible] x 19'-11"	ST 403
	A2	4	3"x2"x ¼ x 5'-[illegible]	ST 403
	A3	2	3"x2"x [illegible] x 5'-[illegible]	ST 403
[illegible] FLATS	F1	5	[illegible] x [illegible] x 6'-[illegible]	ST 402
PATCH PLATES	PP1	18	2" x ¼ x 0'-9	ST 400
	PP2	18	[illegible] x 0'-3"	ST 400
COVER PLATES	A	3	9"x 0.35 x [illegible]	ST 303
	B	6	9 x 0.135" x 5'-2"	ST 303
	C	3	9 x 0.135" x 2'-2"	ST 303
	D	3	9 x 0.135" x 2'-1"	ST 303
ANGLE CLIPS		21	2"x1½"x ¼"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x ⅜"x 3'-6⅞"	ST298
	DUS-2	1	3½"x3½"x ⅜"x 3'-6⅞"	ST298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4x1½"x 1¼"x	BT212
			230 x 6'-6½"	CD204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-6-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.

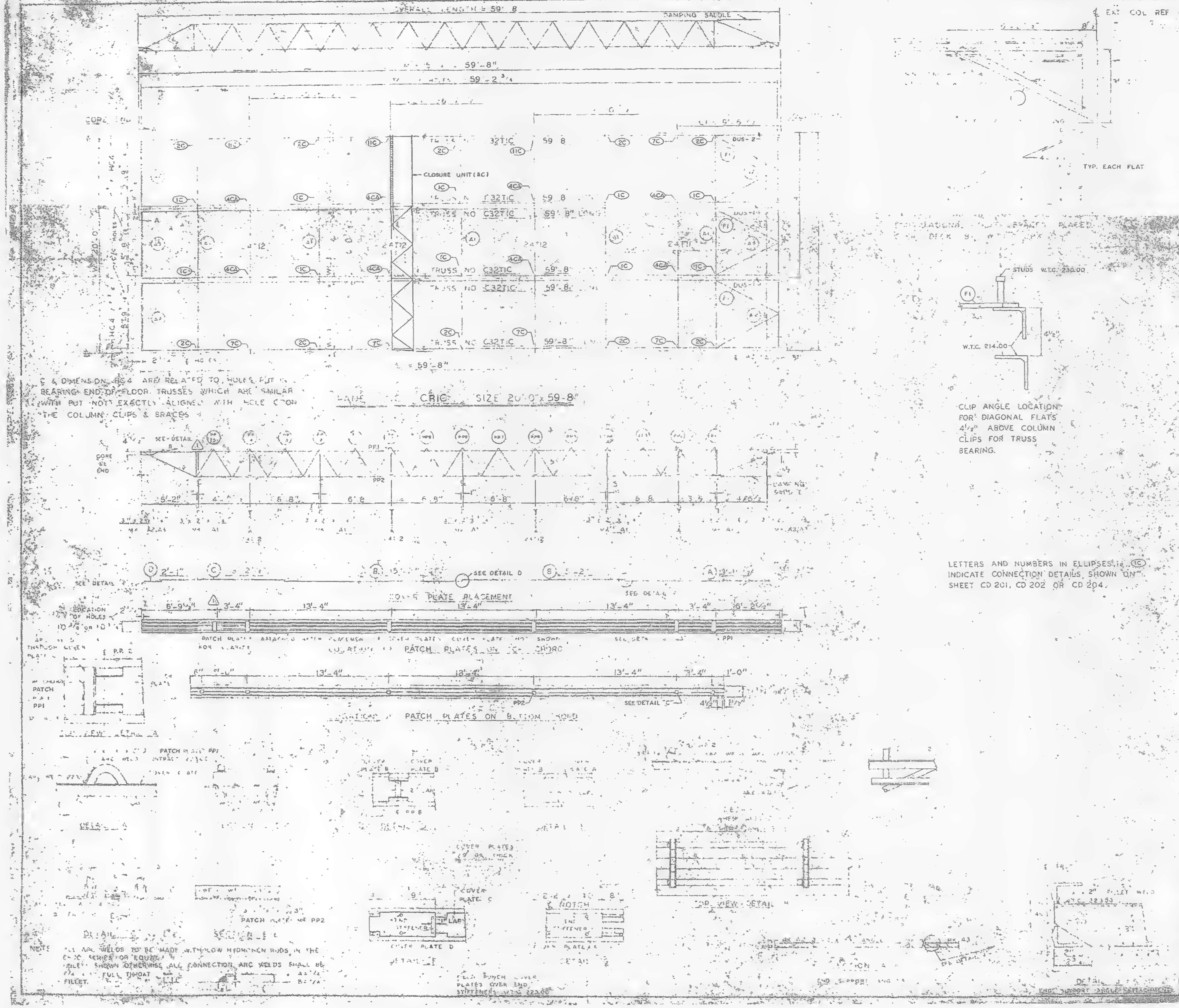
2 REF DRWG.

7-AB4-2	10-15-68
7-AB4-1 & 6	7-22-68
7-AB4-41	7-22-68
SA-12-4	1-6-69
7-AB3-2	1-3-69
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS [illegible] 24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68, 69 NORTH
PANEL CRIA [illegible] 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST) 2

FABRICATED BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-B [illegible] 4-1-68	
APPROVED FOR FABRICATION BY [illegible]	DATE [illegible]	DRAWN BY [illegible] DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY S.B.PAUL DATE APRIL 10, 1968	[illegible]
DETAILED [illegible]		FABRICATION CONT NO W.T.C. [illegible]	CRIA



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUIV. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 3/16 FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	1C	6	C32T1C - 59'-8"	ST 200
BRIDGING TRUSSES	T1	1	24T11 - 19'-11"	BT211
	T12	3	24T12 - 19'-11"	BT212
3"x2"x1/4 ANGLE	A1	5	3"x2"x1/4"x 19'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11 1/8	ST 403
	A3	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x [illegible] x 0'-9"	ST 400
	PP2	18	3" x [illegible] x 0'-3"	ST 400
COVER PLATES	A	3	9"x 0135" x 13'-11 1/2"	ST 303
	B	6	9"x 0135" x 16'-8"	ST 303
	C	3	9"x 0135" x 13'-2"	ST 303
	D	3	9"x 0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1 ø x 1'-3"	ST 400
CLOSURE UNIT	8C	3	2 ∠s 1 1/2" x 1 1/4" x	BT 212
			.250 x 6'-6 1/2"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400

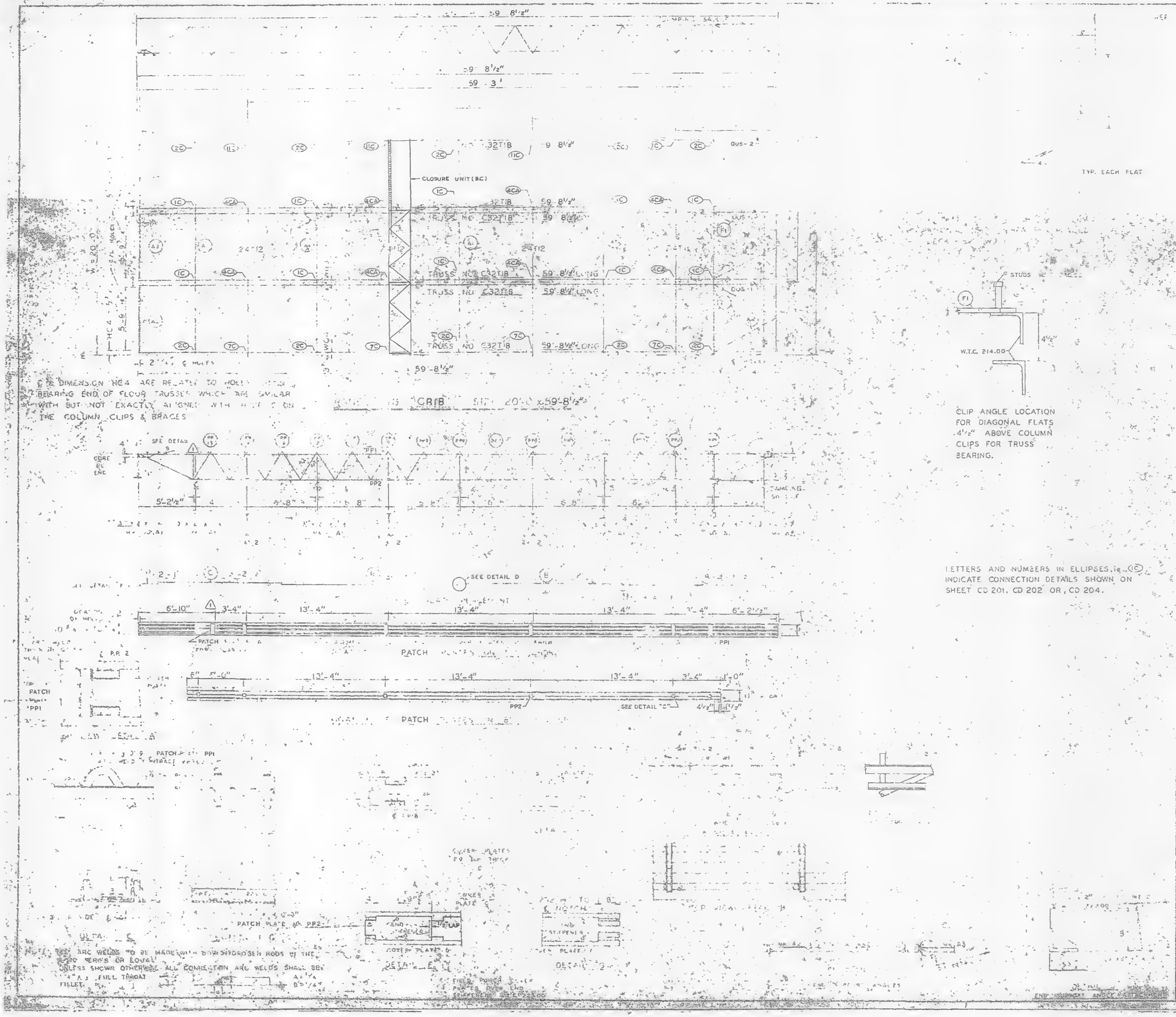
NO.	DATE	REVISION	BY
⚠1	6-9-69	AS NOTED	G.D.

⚠1 REF DRWG
7-AB4-3 10-15-68
7-AB4-15,16 & 39 7-22-68
7-AB4-41 7-22-68
SA-12A 1-5-69
7-AB3-2 1-3-68
7-AB1-2 7-22-68
7-AB2-6 & 7 7-22-68
7-AB4-A2 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. B FLOORS 49-58, 60-66, 68-74, 79-91 & 93-106
PANEL CR1C 20'-0"
BLDG. B FLOORS 49-58, 60-74, 79-91 & 93-106 (EAST) ⚠1

FABRICATED BY LA CLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [illegible]	DATE
APPROVED FOR FABRICATION BY	DATE
DESIGN DRAWING NO. 7-AB3-B	
DRAWN BY	DATE OCT 23, 1968
CHECKED BY J.T.M. CHUR	DATE OCT 23, 1968



DIMENSION HC4 ARE RELATED TO HOLES ... BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH ... ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR, CD 204.

NOTE: ... ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS ... UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ... FULL THROAT FILLET

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
		8	C32T18 - 59'-8½"	ST208
		1	[illegible]	BT211
	T12	3	24T12 19'-11"	BT212
ANGLE	A1	3	[illegible]	ST 403
	A2	4	[illegible]	ST 403
	A3	[illegible]	[illegible]	ST 403
	[illegible]	[illegible]	[illegible]	ST 402
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible] 3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-[illegible]½"	ST303
	B	6	9" x .0135" x 15'-2"	ST303
	C	3	9" x .0135" x 13'-2½"	ST303
	D	3	9" x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1½" x ¼" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS	2	3½" x 3½" x ⅜" x 3'-6⅞"	ST298
	DUS-2	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST298
CONNECTION BAR	CB1	4	[illegible] x 1'-3"	ST 400
CLOSURE - UNIT	BC	3	2 - [illegible] 1½" x 1¼" x	BT212
			.230 x 6'-6½"	CD204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
△1	6-9-69	AS NOTED	G.D.C.

△1 REF. DWG.

- 7-AB4-3 — 10-15-68
- [illegible] 15,16 — 7-22-68
- [illegible] 41 — 7-22-68
- SA 2,4 — 1-6-69
- 7-AB3-2 — 1-3-68
- 7-AB3-2 — 7-22-68
- 7-AB2-6 & 7 — 7-22-68
- 7-AB4-A2 — 10-15-68

[illegible] TAILS

WORLD TRADE CENTER - N.Y.C.

[illegible] AUTHORITY

83-91 & 93-106 (N)

PANEL CRIB [illegible] 59'-8½"

BLDG. B FLOORS 83-91 & 93-106 (WEST) △1

FABRICATION BY LACLEDE STEEL COMPANY

MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-8

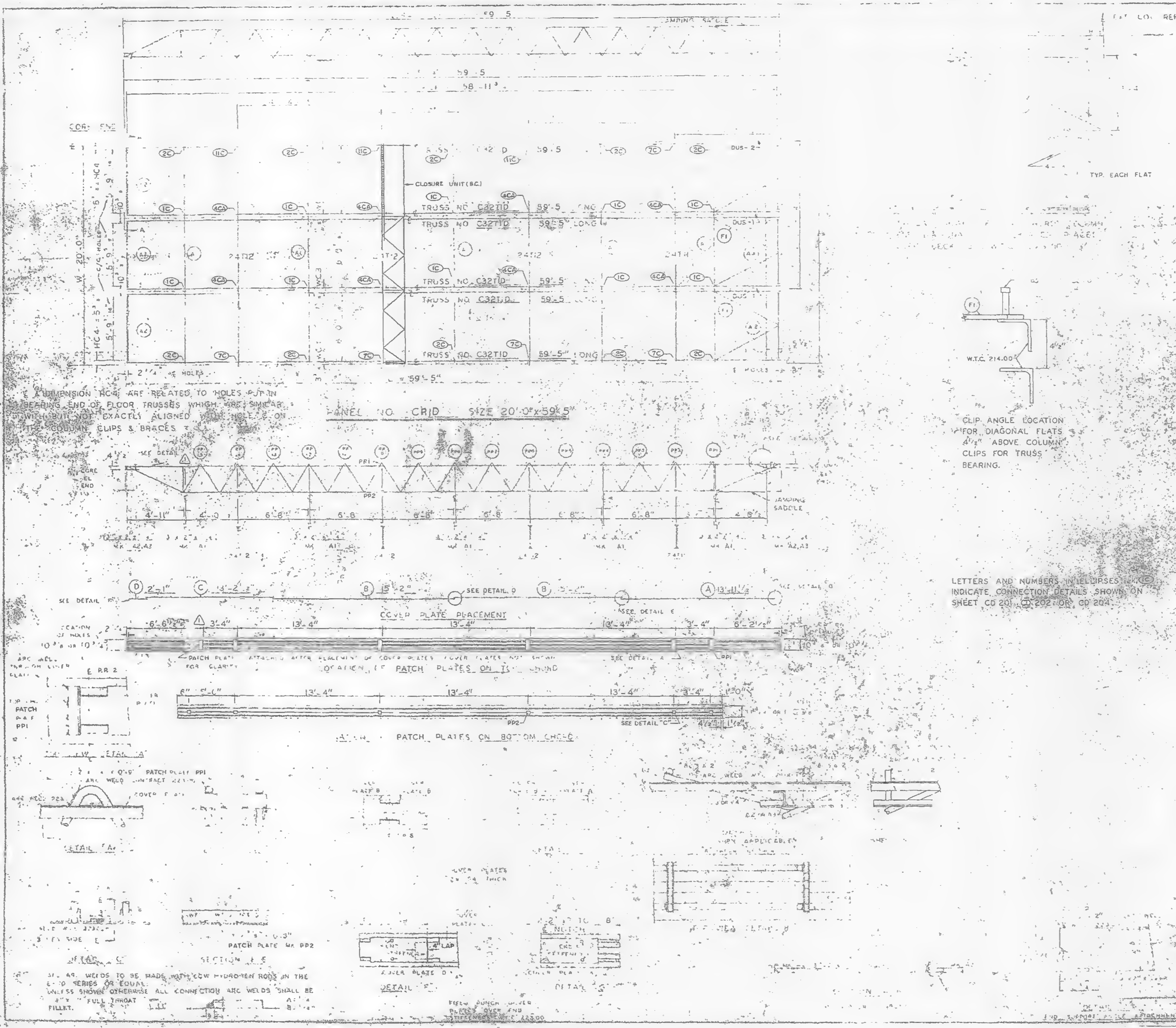
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]

DRAWN BY [illegible] DATE OCT. 23, 1968

APPROVED FOR FABRICATION BY [illegible] DATE [illegible]

CHECKED BY T.M.CHUR DATE OCT. 23, 1968

DETAILED [illegible]



℄ A DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. CRID SIZE 20'-0" x 59'-5"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

ALL WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 3/16" FULL THROAT FILLET.

REQUIRED MATERIAL PER. PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	D	6	C32T1D - 59'-5"	ST201D
[illegible]	1	1	24T.. 19'-11"	BT211
	T-2	3	24T12 - 19'-11"	BT212
[illegible] ANGLE	A1	6	3"x2"x1/4 x 19'-11"	ST 403
	A2	4	3"x2"x1/4 x 5'-11 1/4	ST 403
	A3	2	3"x2"x1/4"x5'-11 3/4"	ST 403
DIAGONAL FLATS	F	6	1 1/2"x 3/8 x 5'-8"	ST 402
PATCH PLATES	PP1	18	2"x1/4"x0'-5	ST 400
	PP2	18	3"x3/8"x0'-3"	ST 400
COVER PLATES	A	3	9 x .0135"x13'-11 1/8"	ST303
	B	6	9 x .0135"x13'-2"	ST303
	C	3	9"x.0135"x13'-2 1/2"	ST303
	D	3	9"x.0135"x2'-1"	ST303
ANGLE CLIPS	C1	21	2"x1 1/2"x1/4"x0'-6	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	[illegible]
	DUS-2	1	[illegible]	[illegible]
CONNECTION BAR	CB1	[illegible]	[illegible]	ST 400
CLOSURE UNIT	BC	3	2"x1 1/2"x1/4 [illegible]	[illegible]
			230 x 0'-8 1/2"	[illegible]
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-5"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400

NO.	DATE	REVISION		BY
⚠1	6-9-69	AS NOTED	[illegible]	G.D.L.

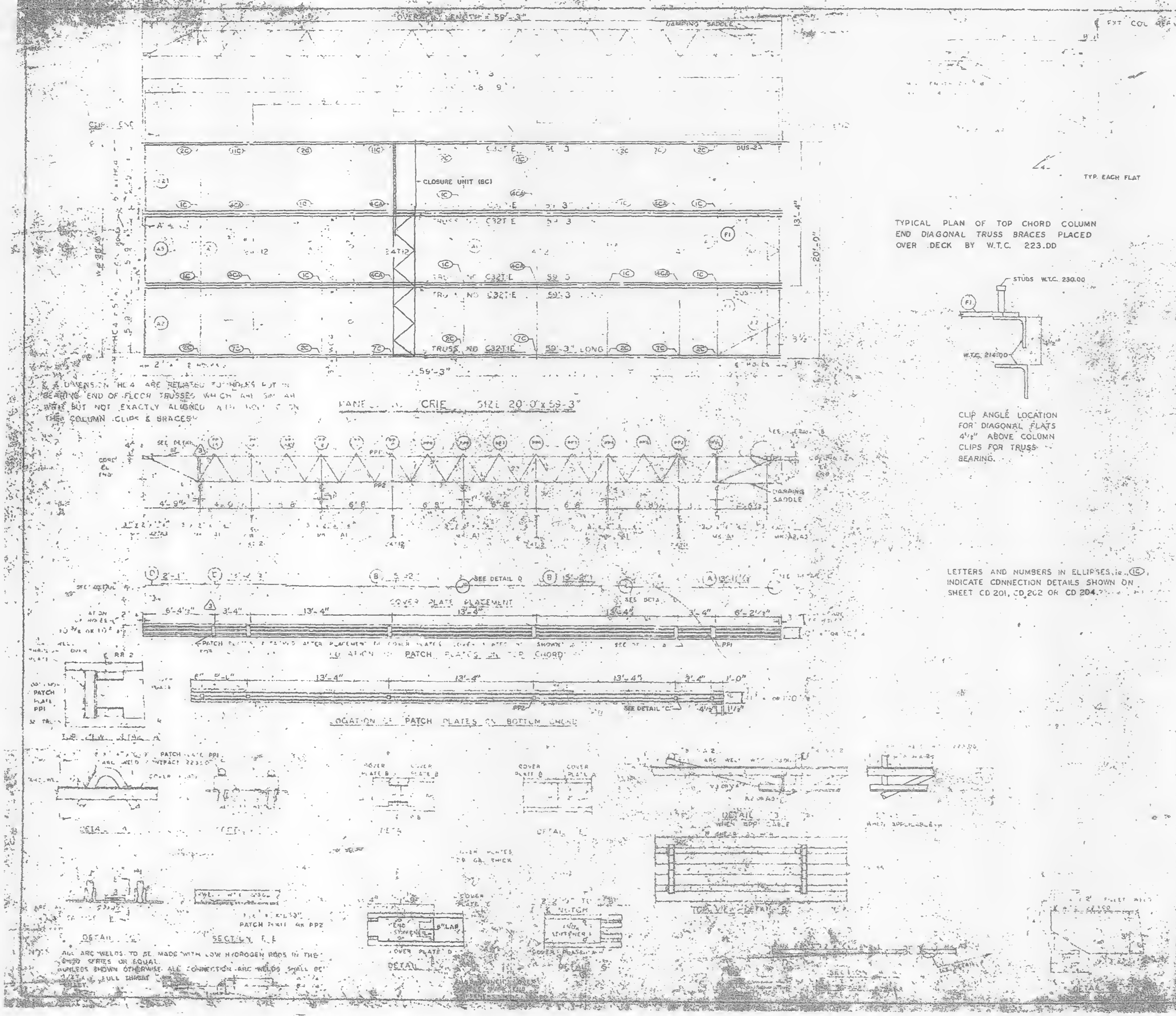
⚠1 REF DRWG

7-A84-31	10-15-68
7-A84-15,16 & 39	7-22-68
7-A84-41	7-22-68
SA-12A	1-6-69
7-A83-2	1-5-68
7-A81-2	7-22-68
7-A82-3 & 7	7-22-68
7-A84-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 81-82 (N)
PANEL CRID 20'-0"
BLDG. B FLOORS 81-82 (WEST) ⚠1

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-8
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE
DRAWN BY [illegible] DATE OCT 23, 1968
APPROVED FOR FABRICATION BY [illegible] DATE
CHECKED BY T.M.CHURA [illegible] DATE OCT 23, 1968
DETAILED BY S.G.DIETER
FABRICATION CONTR. NO. [illegible]
CRID



& A DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN THE COLUMN CLIPS & BRACES

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.DD

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 3/16 FULL LENGTH FILLET.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	SPEC.
FLOOR TRUSSES	[illegible]	[illegible]	[illegible] 59'-3"	[illegible]
[illegible] TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	3	[illegible]	[illegible]
[illegible] ANGLE	A1	5	[illegible]	ST 400
	A2	4	[illegible]	ST 400
	A	[illegible]	[illegible]	ST 400
[illegible] PLATES	F	8	[illegible]	ST 400
PATCH PLATES	PP1	18	[illegible]	ST 400
	PP2	18	[illegible]	ST 400
COVER PLATES	A	3	[illegible]	[illegible]
	B	6	[illegible]	[illegible]
	C	3	[illegible]	[illegible]
	[illegible]	3	9 x [illegible] x 2'-1"	[illegible]
ANGLE CLIPS	C	21	[illegible]	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-[illegible]"	ST 400
DAMPING SADDLE	[illegible]	[illegible]	[illegible]	[illegible]
	DUS-2	1	[illegible]	ST 250
CONNECTION BAR	CB1	4	1 [illegible] x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 [illegible]	ST 214
			230 x 5 - 8½"	C 0204
CONNECTION PLATES	P1	5	3½" x [illegible] x 0'-8½"	ST 400
	P2	4	4½" x .38" x 0'-9"	ST 400
	P3	1	4½" x .38" x 1'-0"	ST 400

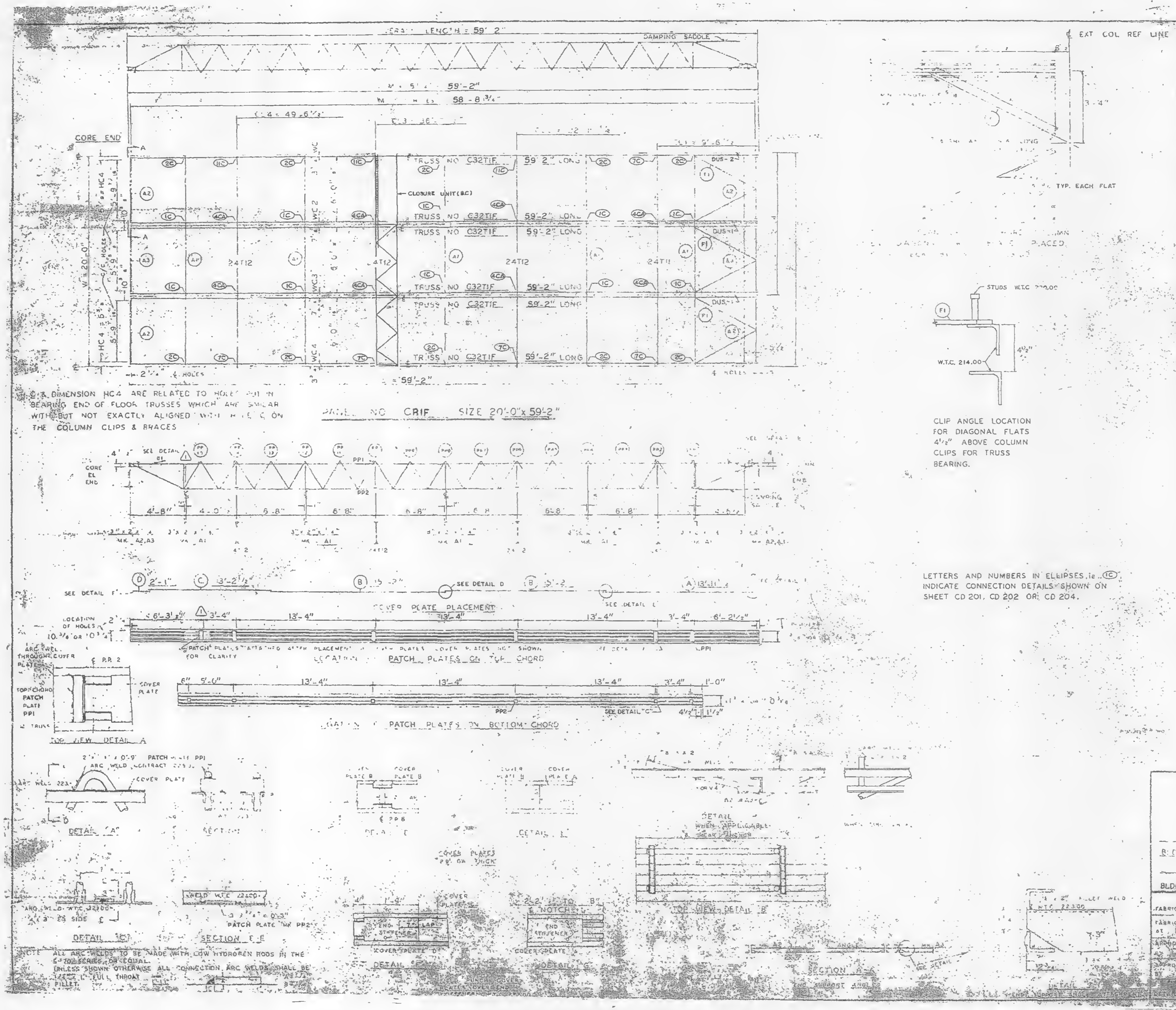
NO.	DATE	REVISION	
3	8-5-69	AS NOTED	G.D.C.
2	10-16-68	MAT'L LIST	G.C.
1	7-17-68	GENERAL	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

10-11 (SOUTH)

PANEL CRIE

FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION
DATE
DATE AUG. 10, 1968



C.A. DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH THE C ON THE COLUMN CLIPS & BRACES

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1F	6	C32T1F - 59'-2"	ST201F
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT211
	T12	3	24T12 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	5	3"x2"x1/4"x 19'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11 9/16"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 3/8"x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x .4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9"x .0135" x 13'-8 1/2"	ST 303
	B	6	9" x .0135" x 13'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	[illegible]	ST 400
B SHEAR ANCHOR	SA2	9	B REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x 3/8"x 3'-6 7/8"	[illegible]
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x 3'-6 7/8"	[illegible]
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 4x1 1/2"x 1 1/4"x	BT212
			230 x 8'-6 1/2"	CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400

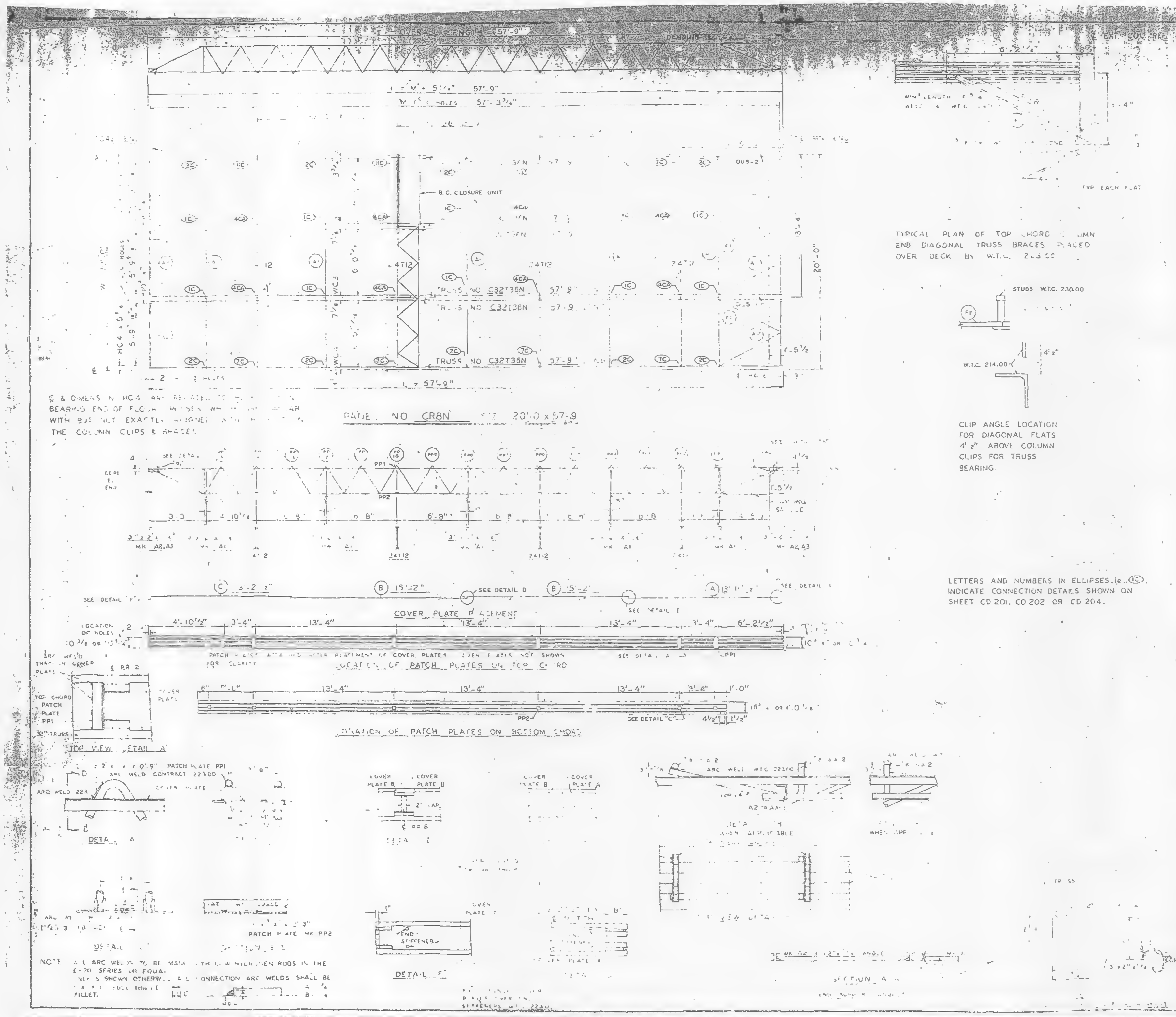
1	8-9-69	AS NOTED
NO.	DATE	REVISION

REF. DWG.
7-AB4-3
7-AB4-15,16 & 39
7-AB4-41
SA-124
7-AB3-2
7-AB1-2
7-22
7-AB4-42

PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48 (S) 47-48, 70-71 (N)
PANEL CRIF 20
BLDG. B FLOORS 47-48 (EAST & WEST) 70-71 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO.
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.
DATE OCT 23, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR
CHECKED BY T.M.C.
DATE OCT 23



& DIMENSIONS IN HC4 ... BEARING END OF FLOOR TRUSSES ... WITH BUT NOT EXACTLY ALIGNED WITH ... THE COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, (e.g. ①C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ... FULL THROAT FILLET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	[illegible]	[illegible]	[illegible]	[illegible]
BRIDGING TRUSSES	T11	1	24 ... 9 ...	BT211
	T12	3	24 ... 19'-11"	BT212
3 × 2" × 1/4" ANGLE	A1	5	3" × 2" × 1/4" × 19'-1"	ST 403
	A2	4	3" × 2" × 1/4" × 5'-11"	ST 403
	A3	2	3" × 2" × 1/4" × 5 ...	ST 403
[illegible]	F	5	[illegible]	ST 402
PATCH PLATE	PP1	8	[illegible]	ST 400
	PP2	8	[illegible]	ST 400
COVER PLATE		3	[illegible]	ST 303
		6	[illegible]	ST 303
	C	3	9 × 0.35" × 13'-2 1/2"	ST 303
ANGLE CLIPS		21	2 × 1/2" × 1/4" × 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR × 0'-9"	ST 400
DAMPING SADDLE		2	3" × 3 1/2" × 3/8" × 3'-6 7/8"	ST 296
		[illegible]	... 2" × 3/8" × 3'-6 7/8"	ST 298
CONNECTION BAR	CB	4	... 1'-3"	ST 400
CLOSURE UNIT ⚠1	BC	3	1 1/4" □ TUBE × 6'-6 1/2"	BT 212
				CD 204
CONNECTION PLATES	P1	5	3 1/2" × 3/8" × 0'-6 1/2"	ST 400
	P2	4	4 1/2" × .39" × 0'-9"	ST 400
	P3	1	4 1/2" × .39" × 1'-0"	ST 400

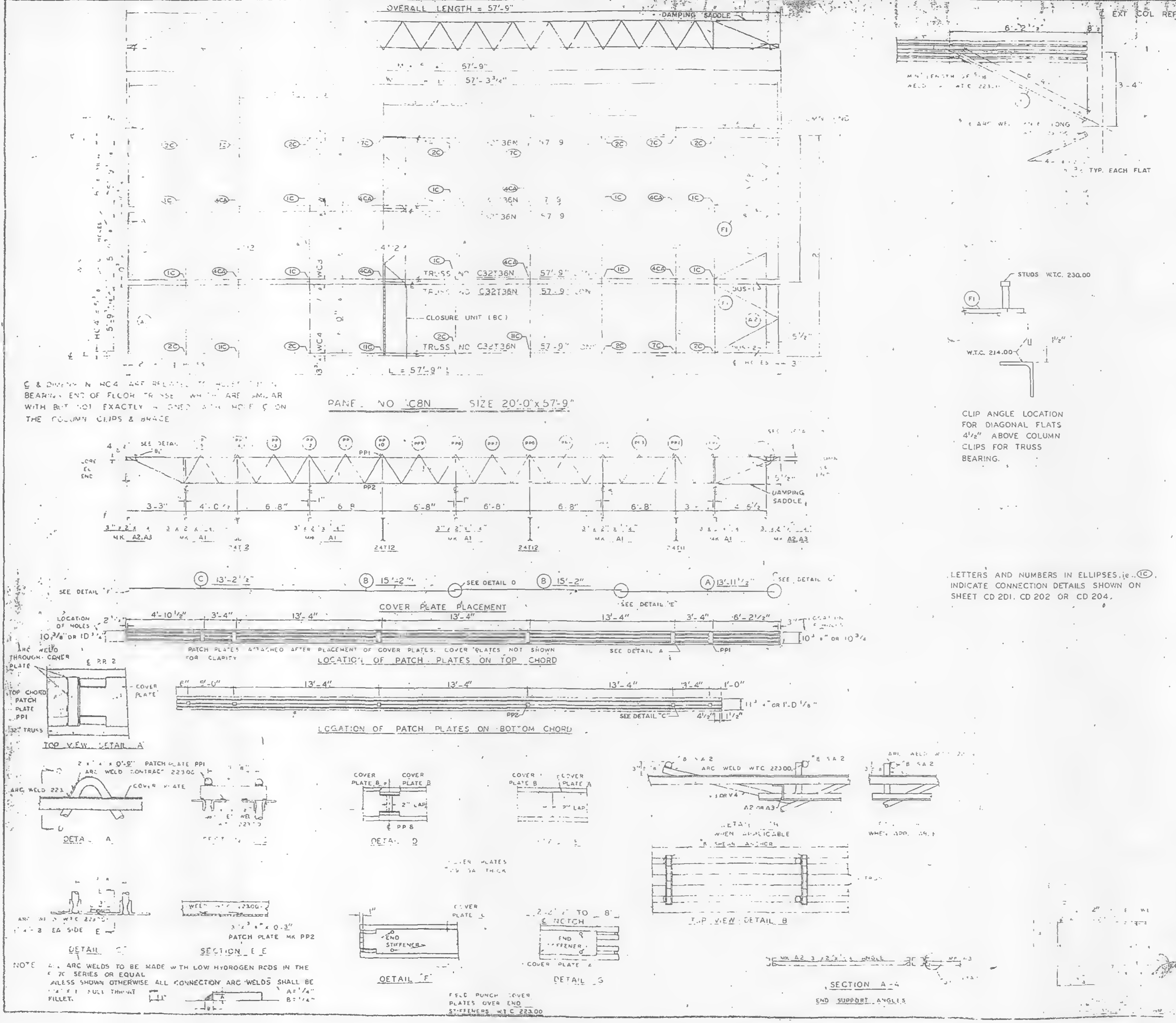
NO	DATE	REVISION	BY
⚠1	4-24-69	AS NOTED	G.O.C.

7-A84-19 12-20-68
10-15-68
7-22-68
7-22-68
1-6-69
57 1-6-69
32 1-6-69
7-22-68
42 10-15-68

CR8N 7-9

APPROVED James W. ... 6/12/69

DRAWING NO
...3 57
PLATE
DRAWN BY
DATE MARCH 31, 1969
CHECKED BY T.M. CHURA
DATE MARCH 31, 1969
IN CHARGE OF
PROD. DEV.
FABRICATION CONT. NO 221
SHEET NO FP CR8N



℄ & DIMENSION HC4 ARE RELATED TO BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACE

PANEL NO C8N SIZE 20'-0"x57'-9"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE [illegible] FULL THROAT FILLET. A = 1/4" B = 1/4"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	[illegible]	6	[illegible]	ST 226
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT211
	T12	3	24T12 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4" x 19'-11"	ST 403
	A2	4	3"x2"x1/4" x 5'-11 9/16"	ST 403
	A3	2	3"x2"x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	[illegible]	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATE	PP1	18	2"x 1/4" x 0'-9"	ST 400
	PP2	18	[illegible] x 3/8" x 0'-3"	ST 400
COVER PLATES		3	[illegible]	ST 303
		4	[illegible] 5.2	ST 303
	C	3	3" x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	C1	21	2" x 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA8	5	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3" x 3 1/2" x 3/8" x 3-6 7/8"	ST 298
	DUS-2	1	[illegible] x 3 1/2" x 3/8" x 3-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" ⌀ x 1'-3"	ST 400
CLOSURE UNIT △1	BC	3	1 1/4" ⌀ TUBE x 6'-6 1/2"	BT 212
				CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	4-24-69	AS NOTED	G.D

REF DWGS

7-AB4-19	12-20-68
7-AB4 11	10-15-68
7-AB4 5 & 6	7-22-68
7-AB4 41	7-22-68
SA 124	1-6-69
7-AB3-56	1-6-69
7-AB1-32	1-5-69
7-AB2 6 & 7	7-22-68
7-AB4-42	10-15-68

DETAIL

C

AUTHOR

44 (SOUTH END)

C8N 7-9

COMPANY

DESIGN DRAWING NO
7-AB3 56

PLATE

APPROVED FOR FABRICATION DATE 6/17/69

DRAWN BY
DATE MARCH 31, 1969

CHECKED BY T.M. CHURA
DATE MARCH 31, 1969

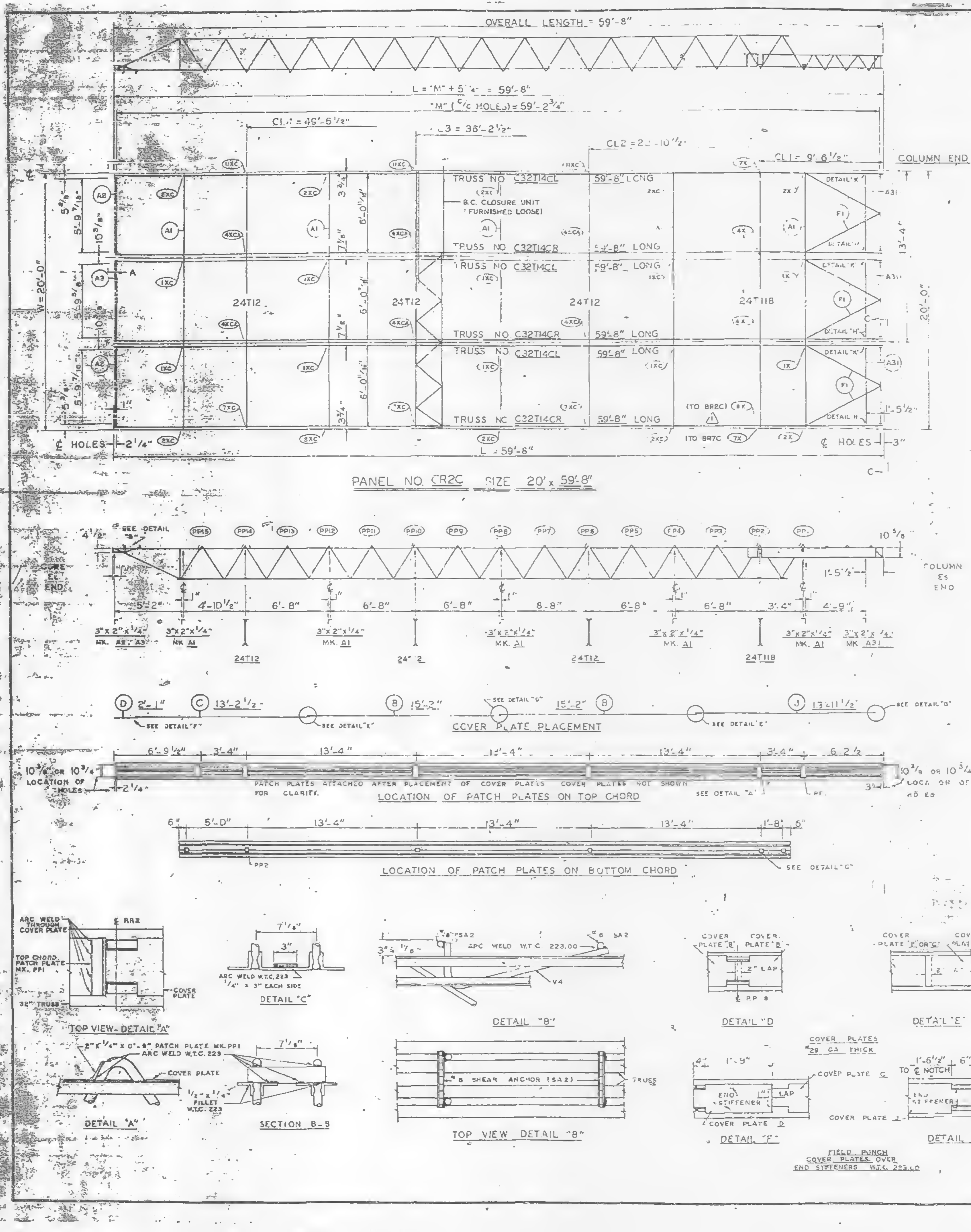
IN CHARGE OF PROD. DEV.

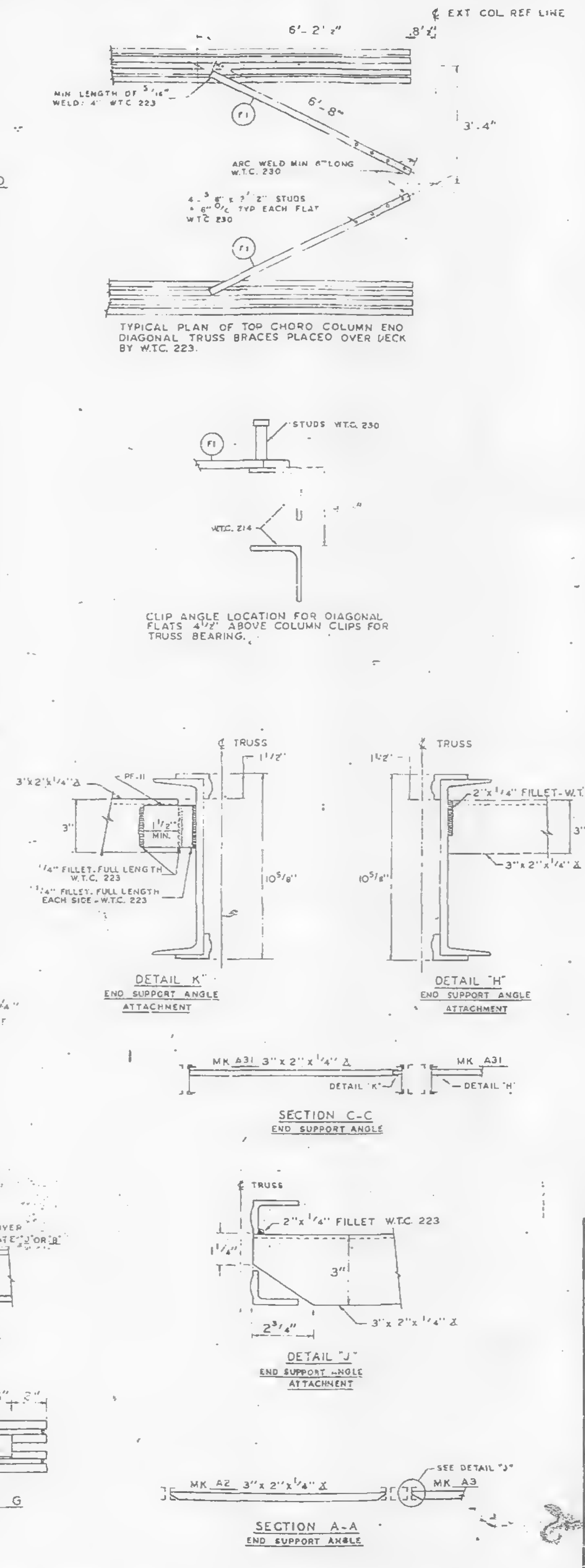
APPROVED FOR INSTALLATION DATE

FABRICATION CONT. NO.
W.T.C. 221

SHEET NO.
FP C8N

DETAILED BY




C EXT COL REF LINE
6'-2 ½"
MIN LENGTH OF 3 ½" WELD: 4" W.T.C. 223
ARC WELD MIN 6" LONG W.T.C. 230
4 - ⅝" x 3'-2" STUDS 6" C/C TYP EACH FLAT W.T.C. 230
F1
3'-4"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
STUDS W.T.C. 230
W.T.C. 214
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 ½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
C TRUSS
3"x 2"x ¼" A
¼" FILLET FULL LENGTH W.T.C. 223
¼" FILLET FULL LENGTH EACH SIDE W.T.C. 223
10 ⅝"
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
2"x ¼" FILLET W.T.C. 223
3"x 2"x ¼" A
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT
MK A31 3"x 2"x ¼" A
DETAIL "K"
DETAIL "H"
SECTION C-C
END SUPPORT ANGLE
C TRUSS
2"x ¼" FILLET W.T.C. 223
3"x 2"x ¼" A
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK A2 3"x 2"x ¼" A
SEE DETAIL "J"
MK A3
SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 2119
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1¼" Ø 6'-6½" TUBE	BT 212
3"x 2"x ¼" ANGLE	A1	5	3"x 2"x ¼"x 19'-11"	ST 403
	A2	2	3"x 2"x ¼"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x ¼"x 5'-11 ¾"	ST 403
	A31	3	3"x 2"x ¼"x 5'-8 ⅛"	ST 410
CLOSURE PLATES	P	3	3"x ¼" x 0'-2 ⅜"	ST 412
DIAGONAL FLATS	F1	6	2" x ⅝" x 5'-8"	ST 402
PATCH PLATES	PP1	6	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135"x 15'-2"	ST 303
	C	3	9"x .0135"x 13'-2½"	ST 303
	O	3	9"x .0135"x 2'-1"	ST 303
	J	3	9"x .0135"x 13'-11½"	ST 304
ANGLE CLIPS	C1	21	2"x 1½"x .25"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400
	P9	6	3" x ½" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x ¼" FULL THROAT FILLET.

A = ¼"
B = ¼"

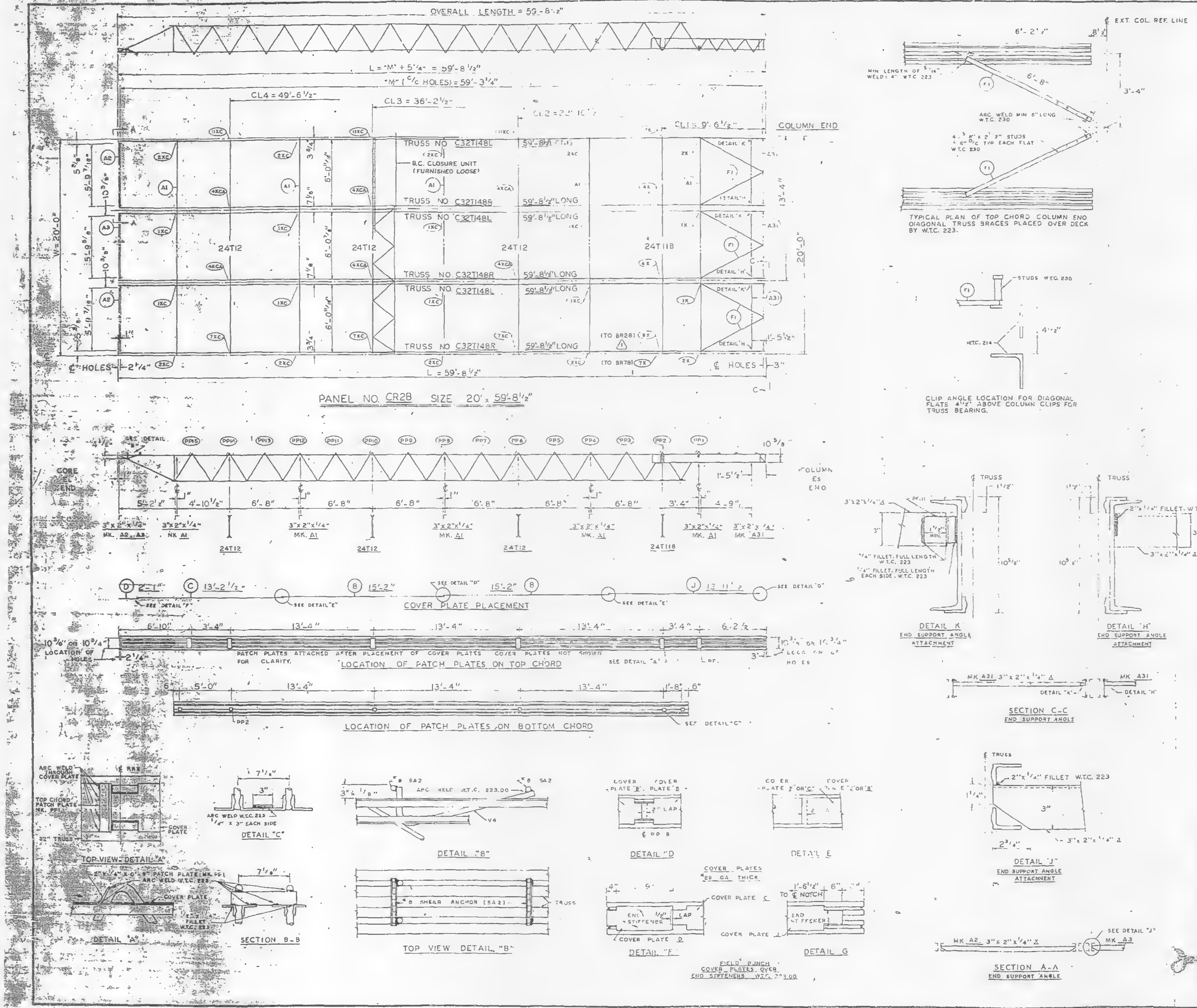
NO.	DATE	REVISION
1	5-12-69	AS NOTED

REF DRWG.		
	7-AB3-29	10-4-68
	7-AB4-28	7-22-68
	7-AB1-13	10-4-68
	7-AB2-7	7-22-68
	7-AB2-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

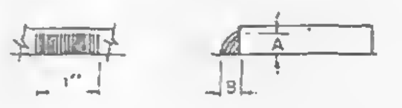
BLDG. A FLOORS 59 & 92 (SOUTH)
PANEL CR2C - 20' x 59'-8
BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-29
PLATE
APPROVED FOR FABRICATION BY FOR PONYA
DATE 6/6/69
DRAWN BY L.R
DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE
CHECKED BY T.M. CHURA
DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED LACLEDE STEEL CO.
FABRICATION CONT NO W.T.C. 221
SHEET NO FP CR2C


OVERALL LENGTH = 59'-8 1/2"
L = "M" + 5 1/4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-3 1/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T148L
B.C. CLOSURE UNIT (FURNISHED LOOSE)
TRUSS NO. C32T148R 59'-8 1/2" LONG
TRUSS NO. C32T148L 59'-8 1/2" LONG
TRUSS NO. C32T148R 59'-8 1/2" LONG
24T12
24T11B
W = 20'-0"
℄ HOLES
L = 59'-8 1/2"
PANEL NO. CR2B SIZE 20' x 59'-8 1/2"
DETAIL "K"
DETAIL "H"
COLUMN END
3"x2"x1/4" MK. A1
3"x2"x1/4" MK. A31
COVER PLATE PLACEMENT
SEE DETAIL "E"
SEE DETAIL "D"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
EXT. COL. REF. LINE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
ARC WELD MIN 8" LONG W.T.C. 230
STUDS W.T.C. 230
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL K END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
1/4" FILLET W.T.C 223
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
2"x1/4" FILLET W.T.C. 223
SECTION A-A END SUPPORT ANGLE
DETAIL "C"
ARC WELD W.T.C. 223 1/4" x 3" EACH SIDE
DETAIL "B"
DETAIL "D"
DETAIL E
TOP VIEW DETAIL "A"
DETAIL "A"
SECTION B-B
#8 SHEAR ANCHOR (SA2)
TOP VIEW DETAIL "B"
COVER PLATES 29 GA. THICK
END STIFFENER
DETAIL "F"
DETAIL G
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T148L	3	C32T148L x 59'-8 1/2"	ST 2148L
	T148R	3	C32T148R x 59'-8 1/2"	ST 2148L
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" ⌀ 6'-6 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A3	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/2"	ST 303
	O	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x 1 1/2"x .25"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	5	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



A = 1/4"
B = 1/4"

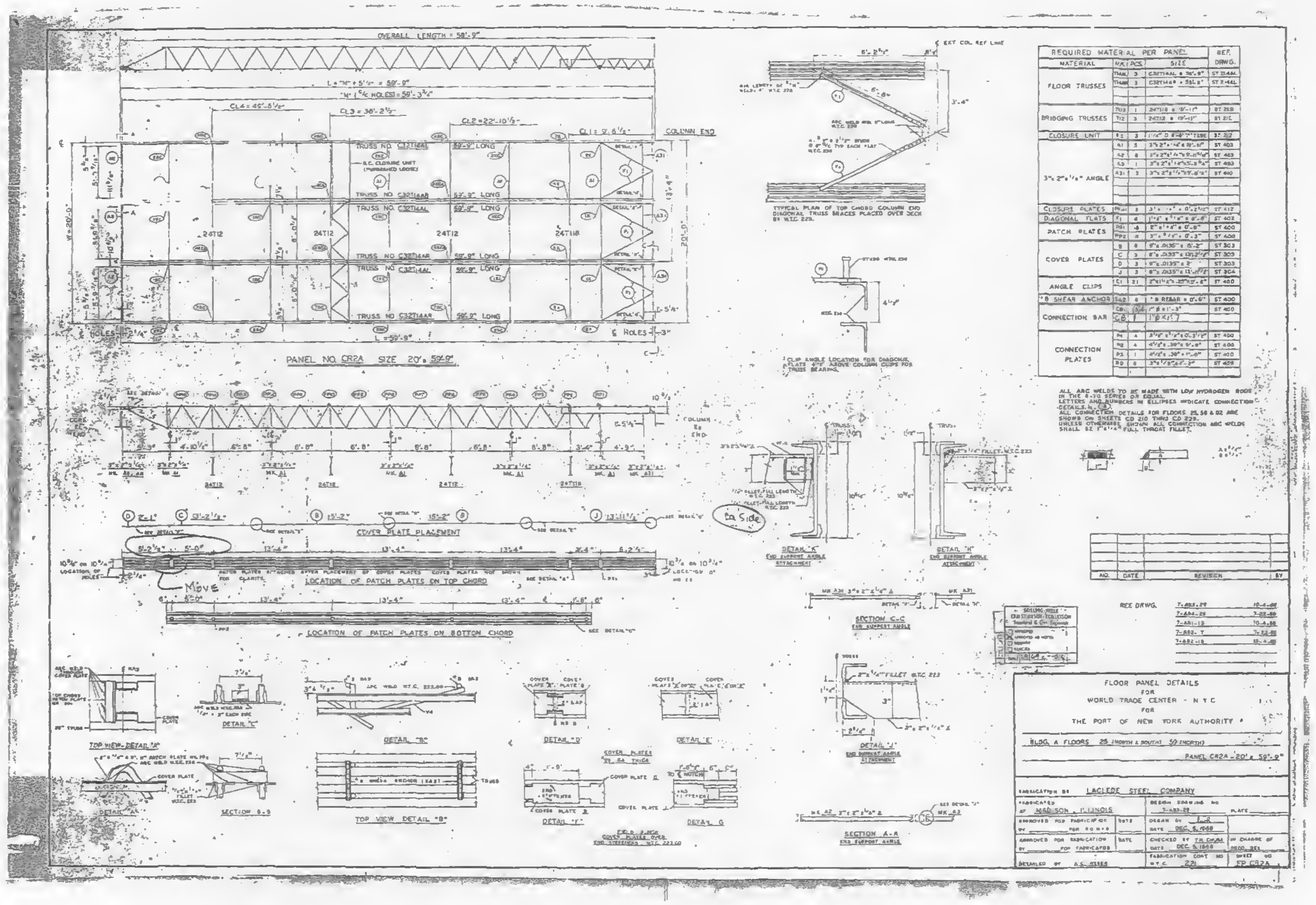
NO.	DATE	REVISION	BY
1	5-12-69	AS NOTED	G.D.C

REF. DRWG.
7-AB3-29 10-4-68
7-AB4-28 7-22-68
7-AB1-13 10-4-68
7-AB2-7 7-22-68
7-AB2-15 10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)
PANEL CR2B - 20' x 59'-8 1/2"
BLDG. B FLOORS 92 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-29
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 6/6/69
DRAWN BY [illegible]
DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
CHECKED BY T.M. CHURA
DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP C92B


OVERALL LENGTH = 59'-9"
L = "M" + 5 1/4" = 59'-9"
"M" (C/C HOLES) = 59'-3 3/4"
CL4 = 45'-5 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14AL 59'-9" LONG
TRUSS NO. C32T14AR 59'-9" LONG
S.C. CLOSURE UNIT (FURNISHED LOOSE)
24T12
24T118
W = 20'-0"
20'-0"
13'-4"
L = 59'-9"
℄ HOLES
PANEL NO. CR2A SIZE 20' x 59'-9"
CORE END
COLUMN END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
Ea Side
Move
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 275.
CLIP ANGLE LOCATION FOR DIAGONAL PLATE 4'-0" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "A"
DETAIL "K"
SECTION C-C
SECTION A-A
DETAIL "J"
TOP VIEW DETAIL "F"
DETAIL "C"
DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "A"
SECTION B-B
TOP VIEW DETAIL "B"
DETAIL "I"
DETAIL G

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	3	C32T14AL x 59'-9"	ST 214AL
	T14AR	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T118	1	24T118 x 19'-11"	ST 218
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	SC	3	1 1/4" D x 8'-8" 1" TUBE	ST 212
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-10"	ST 403
	A2	6	3" x 2" x 1/4" x 8'-11 3/4"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-8 3/4"	ST 403
	A31	3	3" x 2" x 1/4" x 7'-8"	ST 410
CLOSURE PLATES	PCa1	1	3" x 1/4" x 0'-2 1/2"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	16	2" x 1/4" x 0'-3"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 5'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-6"	ST 400
CONNECTION BAR	CB	3/4	1" ø x 1'-3"	ST 400
	CB	1	1"ø x 1'-7	
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-3 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-6"	ST 400
	P9	6	3" x 1/8" x 0'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (4).
ALL CONNECTION DETAILS FOR FLOORS 25, 58 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 223.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

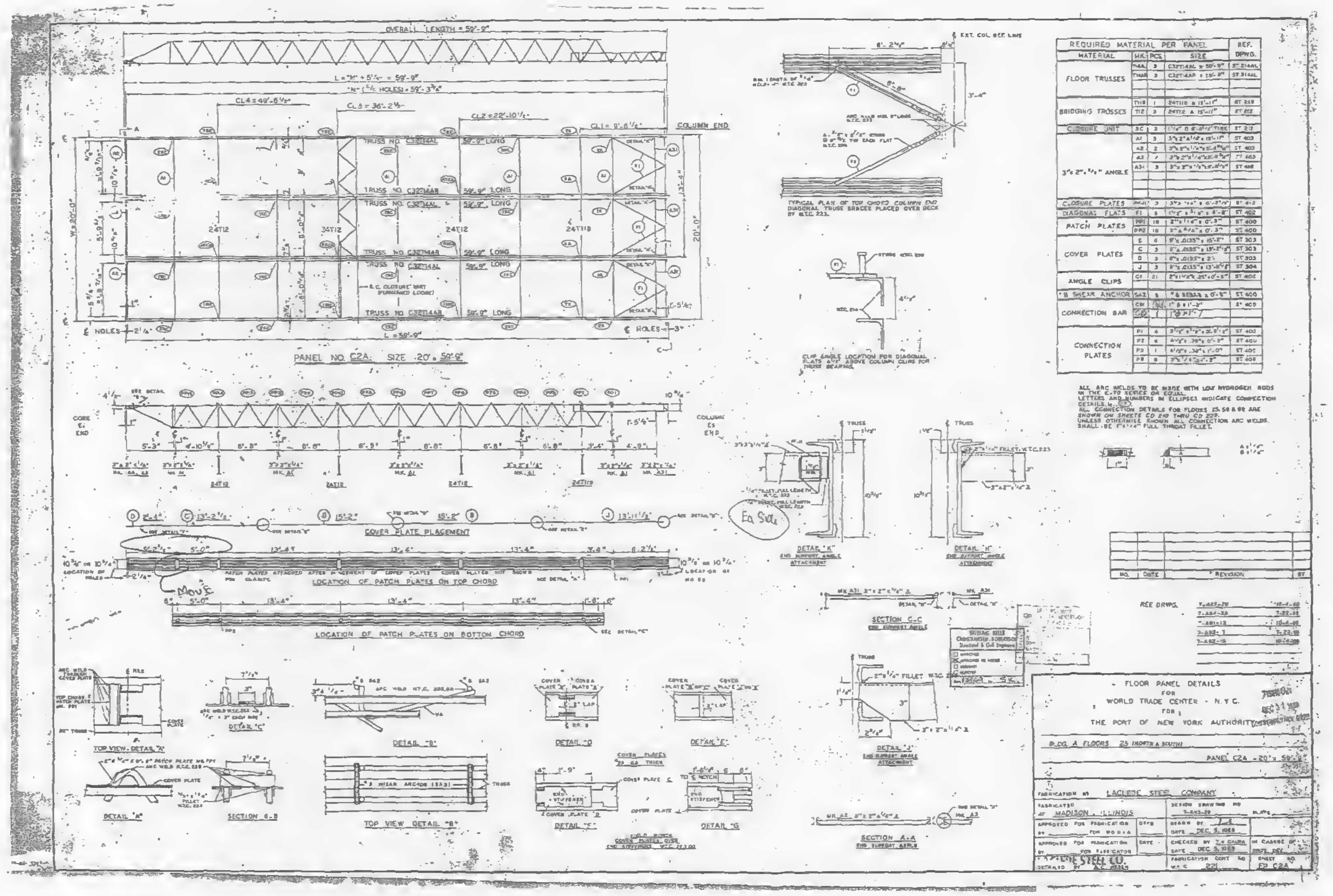
SKILLING · HELLE
CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED

SEE DRWG.		
	7-A83-29	10-4-68
	7-A84-28	7-22-68
	7-A81-13	10-4-68
	7-A82-7	7-22-68
	7-A82-18	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL CR2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-29
PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE
DRAWN BY [illegible] DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.R. CHAN DATE DEC. 5, 1968
IN CHARGE OF PROD. 351
DETAILED BY A.C. ASSEA
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP CR2A



OVERALL LENGTH = 59'-9"
PANEL NO. C2A SIZE 20' x 59'-9"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TRUSS NO. C32T14AL 59'-9" LONG
COLUMN END
CORE END
TOP VIEW - DETAIL "C"
DETAIL "A"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
DETAIL "H"
DETAIL "J"
DETAIL "K"
SECTION C-C
SECTION A-A
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK
CLIP ANGLE LOCATION FOR DIAGONAL
MOVE
Fa Sch

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	3	C32T14AL x 59'-9"	ST 314AL
	T14AR	3	C32T14AR x 59'-9"	ST 314AL
BRIDGING TRUSSES	T118	1	24T118 x 15'-11"	ST 218
	T12	3	24T12 x 15'-11"	ST 212
CLOSURE UNIT	3C	3	[illegible] TUBE	ST 213
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 15'-11"	ST 403
	A2	2	[illegible]	ST 403
	A3	1	[illegible]	ST 403
	A31	3	[illegible]	ST 418
CLOSURE PLATES	[illegible]	3	[illegible]	ST 412
DIAGONAL FLATS	F1	6	[illegible] x 6'-8"	ST 402
PATCH PLATES	PP1	10	2" x 1 1/4" x 0'-3"	ST 400
	PP2	10	[illegible] x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-8"	ST 303
	C	3	9" x .0135" x 13'-[illegible]	ST 303
	D	3	9" x .0135" x 2'	ST 303
	J	3	9" x .0135" x 13'-[illegible]	ST 304
ANGLE CLIPS	C1	21	[illegible]	ST 406
8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	[illegible]	1" φ x 1'-3"	ST 409
	CB	1	1" φ x 1'-7	
CONNECTION PLATES	P1	4	[illegible]	ST 400
	P2	4	[illegible] x 0'-2"	ST 400
	P3	1	[illegible] x 1'-0"	ST 400
	P8	8	[illegible]	ST 408

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. ( ).
ALL CONNECTION DETAILS FOR FLOORS 25, 58 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

REF. DRWG.
7-A83-28 10-4-68
7-A84-28 7-22-68
7-A81-12 10-4-68
7-A82-1 7-22-68
7-A82-15 10-4-68

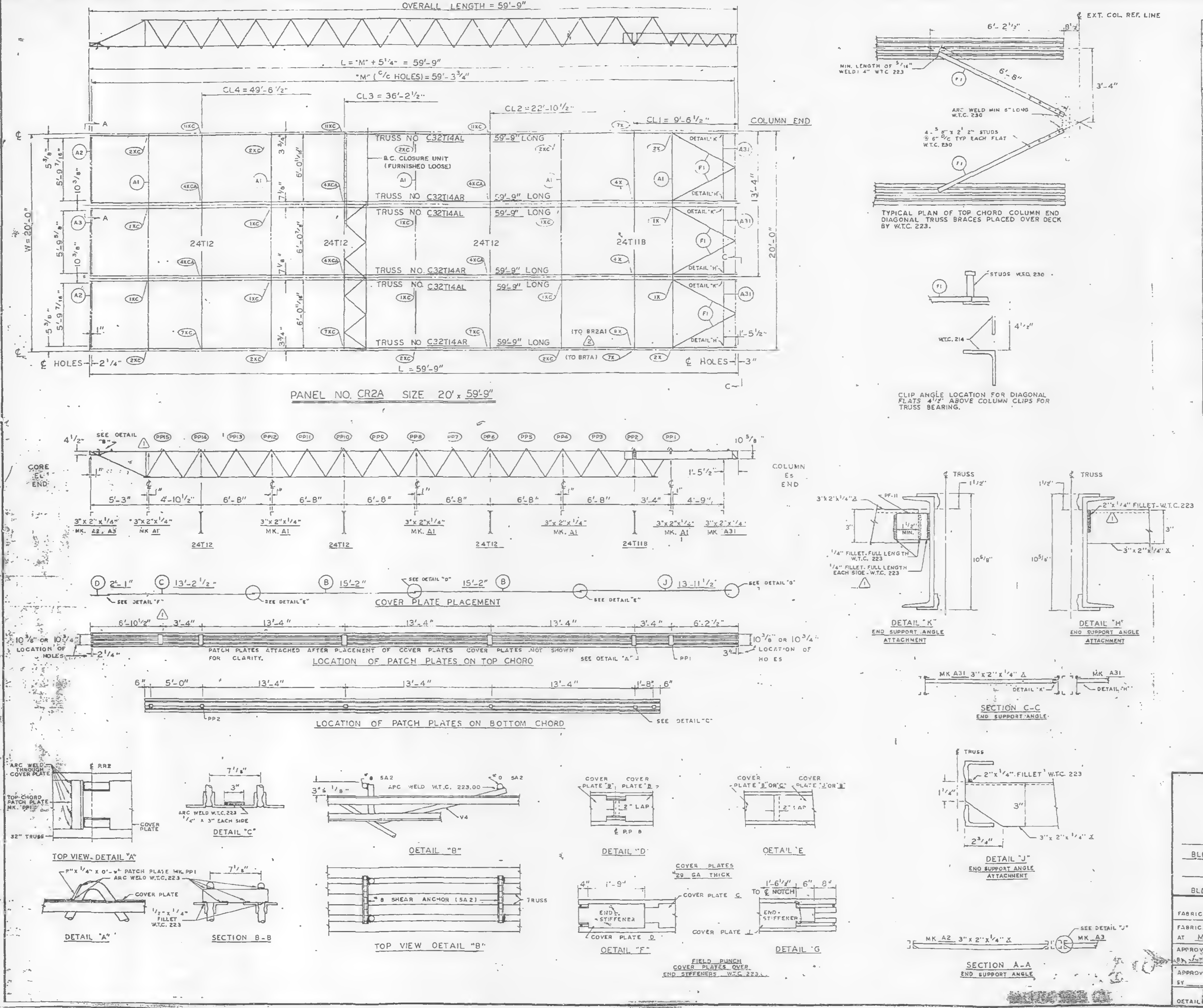
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH)

PANEL C2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-28
APPROVED FOR FABRICATION BY ______ FOR P.O.N.Y.A. DATE ______
DRAWN BY [illegible] DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY ______ FOR FABRICATOR DATE ______
CHECKED BY T.W. CALPA DATE DEC. 5, 1968
IN CHARGE OF ______
DETAILED BY A.C. ______ STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP C2A

DEC 31 1968



PANEL NO. CR2A SIZE 20' x 59'-9"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

DETAIL "K"
END SUPPORT ANGLE ATTACHMENT

DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

TOP VIEW-DETAIL "A"

DETAIL "C"

DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "A"

SECTION B-B

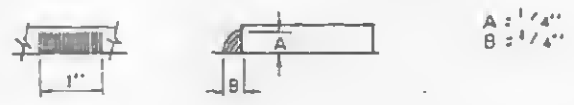
TOP VIEW DETAIL "B"

DETAIL "F"

DETAIL "G"

REQUIRED MATERIAL PER PANEL MATERIAL	MK.	PCS.	SIZE	REF. DRWG.
FLOOR TRUSSES	T14AL	3	C32T14AL x 59'-9"	ST 214AL
	T14AR	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" O 6'-6 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 0'-9"	ST 400
	PP2	18	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x 1 1/2"x .25"x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



A : 1/4"
B : 1/4"

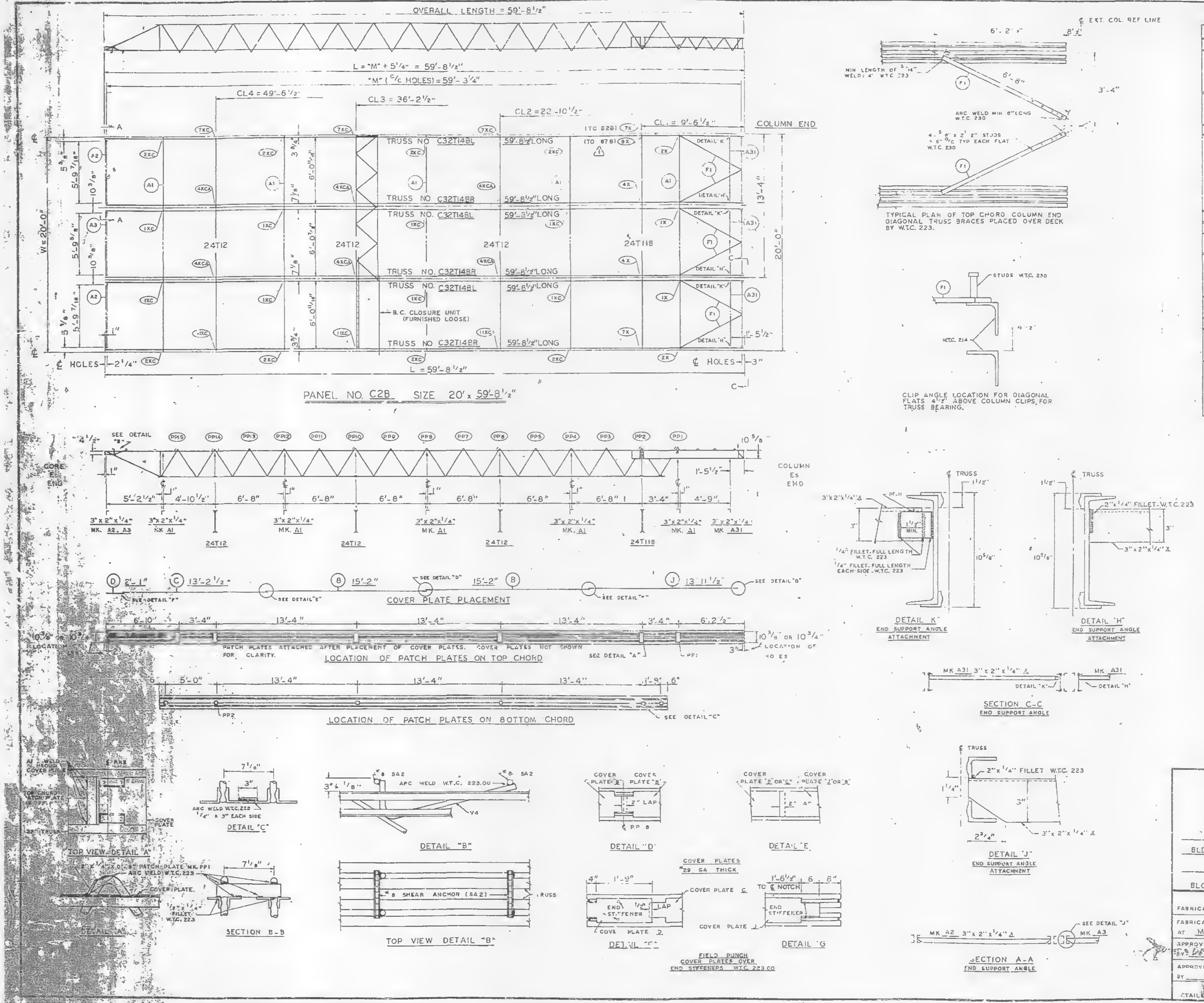
NO.	DATE	REVISION	BY
2	5-12-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

REF. DRWG.		
	7-AB3-29	10-4-68
	7-AB4-28	7-22-68
	7-AB1-13	10-4-68
	7-AB2-7	7-22-68
	7-AB2-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL CR2A - 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-29
PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A. DATE 6/6/69
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DRAWN BY
DATE DEC. 5, 1968
CHECKED BY T.M. CHURA
DATE DEC. 5, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-CR2A


OVERALL LENGTH = 59'-8½"
L = "M" + 5¼" = 59'-8½"
"M" (C/C HOLES) = 59'-3¼"
CL4 = 49'-6½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6⅛"
COLUMN END
TRUSS NO. C32T14BL 59'-8½" LONG
TRUSS NO. C32T14BR 59'-8½" LONG
24T12
24T118
W = 20'-0"
B.C. CLOSURE UNIT (FURNISHED LOOSE)
℄ HOLES 2¼"
℄ HOLES 3"
L = 59'-8½"
PANEL NO. C2B SIZE 20' x 59'-8½"
SEE DETAIL "B"
COLUMN ES END
COVER PLATE PLACEMENT
SEE DETAIL "E"
SEE DETAIL "D"
SEE DETAIL "F"
SEE DETAIL "G"
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
SEE DETAIL "C"
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C END SUPPORT ANGLE
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
SECTION A-A END SUPPORT ANGLE
TOP VIEW DETAIL "A"
DETAIL "A"
DETAIL "C"
SECTION B-B
DETAIL "B"
TOP VIEW DETAIL "B"
#8 SHEAR ANCHOR (SA2)
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
COVER PLATES 29 GA THICK
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.CO

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T148L	3	C32T148L x 59'-8½"	ST 2148L
	T148R	3	C32T148R x 59'-8½"	ST 2148L
BRIDGING TRUSSES	T118	1	24T118 x 19'-11"	BT 2118
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1¼" ◻ 6'-6½" TUBE	BT 212
3" x 2" x ¼" ANGLE	A1	5	3" x 2" x ¼" x 19'-11"	ST 403
	A2	2	3" x 2" x ¼" x 5'-11⁹⁄₁₆"	ST 403
	A3	1	3" x 2" x ¼" x 5'-11¾"	ST 403
	A31	3	3" x 2" x ¼" x 5'-8⅛"	ST 410
CLOSURE PLATES	PF.11	3	3" x ¼" x 0'-2⅜"	ST 412
DIAGONAL FLATS	F1	6	1½" x ⅜" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400
COVER PLATES	B	5	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2½"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 12'-11½"	ST 304
ANGLE CLIPS	C1	21	2" x 1½" x .25" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400
	P9	6	3" x ½" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
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A = ¼"
B = ¼"

NO.	DATE	REVISION	BY
1	5-12-69	AS NOTED	G.D.(

REF. DRWG.

7-A83-28	10-4-68
7-A84-28	7-22-68
7-A81-13	10-4-68
7-A92-7	7-22-68
7-A82-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)
PANEL C2B - 20' x 59'-8½"
BLDG. B FLOORS 92 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-28
PLATE
APPROVED FOR FABRICATION BY FOR PONYA
DATE 6/6/69
DRAWN BY
DATE APRIL 26, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR
DATE
CHECKED BY T.M. CHURA
DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY A. C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO. FP C2B